379.781
L439
1916/17

VERSITY OF ILLINOIS
BUREAU OF
CATIONAL RESEARCH

THE LAWRENCE PUBLIC SCHOOLS

1917

FIFTIETH

ANNUAL REPORT

1918

LAWRENCE
KANSAS

ERRATA:

1. Question 33, "First" division, p. 31, *page 22* should read *page 24*.

2. Question 39, p. 33, the sentence beginning, *Since the score*, etc., should read, *Lawrence eighth graders made a better score than the eighth graders in Indiana.*

UNIVERSITY OF ILLINOIS
BUREAU OF
EDUCATIONAL RESEARCH

50th ANNUAL REPORT

. . . of the . . .

BOARD OF EDUCATION

OF THE CITY OF LAWRENCE FOR THE YEAR
ENDING JUNE 30, 1917.

Press of THE DAILY GAZETTE
Lawrence, Kansas

BOARD OF EDUCATION

AND

ORGANIZATION FOR THE YEAR 1917-1918

OFFICE: MANUAL TRAINING BUILDING

MEMBERS OF THE BOARD

Mrs. E. L. Griffin	Term expires August 4, 1919
W. S. Griesa	Term expires August 4, 1919
S. R. Holloway	Term expires August 4, 1919
A. L. Carey	Term expires August 1, 1921
U. G. Mitchell	Term expires August 1, 1921
E. E. Stauffer	Term expires August 1, 1921

OFFICERS OF THE BOARD

President	S. R. Holloway
Vice-President	W. S. Griesa
Clerk	E. B. Cronemeyer
Treasurer	Mrs. Whit. A. Churchill

COMMITTEES

Teachers and Salaries—Griesa, Mitchell, Carey.
Grades, Studies and Text Books—Griffin, Griesa, Mitchell.
School Houses and School Grounds—Stauffer, Carey, Griesa.
Auditing—Mitchell, Griffin, Stauffer.
Rules and Regulations—Carey, Griffin, Stauffer.
Health—Holloway, A. J. Anderson, Stauffer.

OFFICERS AND CLERKS

Name	Street No.	'Phone No.
Raymond A. Kent, Superintendent	801 La.	177
F. H. Olney, Principal of H. S.	815 Ind.	1964
Mrs. Annie Himoe, Prin. H. S. Asst.	739 Ohio	520W
Mrs. Whit. A. Churchill, Treasurer	1210 Ohio	1616W
E. B. Cronemeyer, Clerk of Board	833 Mo.	1882
E. F. Crocker, Supervisor Bldgs. and Grounds and Repair Man	914 Ky.	1312J
Clara Mears, Supervisor of Hygiene	745 Ill.	1395W

379.781
L439
1916/17

PUBLIC SCHOOLS OF LAWRENCE, KANSAS

TREASURER'S REPORT FOR FISCAL YEAR ENDING JULY 30, 1917

GENERAL FUND

Receipts

Date	Item		
1916			
July 1	Balance in Treasury		$ 3,566.11
	Received from County Treasurer—Taxes:		
July 12	Balance 1915 taxes, due July 1	$ 3,309.11	
Oct. 7	Amount of 1915 taxes, due Oct. 1	7,426.76	
Dec. 13	Part of 1916 taxes, due Jan. 1	20,000.00	
Dec. 30	Part of 1916 taxes, due Jan. 1	4,000.00	
Jan. 13	Balance of 70% of 1916 taxes, due Jan. 1	33,828.69	
June 21	Part of 20% of 1916 taxes, due July 1	13,000.00	
	Total amount taxes received		81,564.56
	Received from State Funds:		
July 15	State Normal Training appropriation	162.00	
Aug. 31	State School Funds	1,564.17	
Mch. 13	State School Funds	2,019.38	
Mch. 22	State Normal Training appropriation	156.50	
	Total amount State Funds		3,902.05
	Received from Clerk:		
July to June	Tuition collected from non-residents		4,301.31
July to June	Sales of old furnaces, scrap iron, broken windows, R. R. claim damage, etc.	150.25	
	Return of freight paid on floor oil	4.30	
	Breakage in Chemistry Department	12.34	
	Breakage in Physics Department	1.75	
	Total Miscellaneous Items		168.64
July to June	Received from Bank:		
	Interest on Daily Balances		134.71
	Total Receipts 1916-17		$93,637.38

Disbursements

Date	Item	Amount
1916		
July 31	Warrants paid and returned	$ 1,132.92
Aug. 31	Warrants paid and returned	1,418.07
Sept. 30	Warrants paid and returned	4,856.80
Oct. 31	Warrants paid and returned	9,028.69
Nov. 30	Warrants paid and returned	308.65
Dec. 31	Warrants paid and returned	22,034.83
Jan. 31	Warrants paid and returned	6,934.90
Feb. 28	Warrants paid and returned	11,247.58
Mch. 31	Warrants paid and returned	12,790.76
Apr. 30	Warrants paid and returned	8,721.48
May 31	Warrants paid and returned	1,777.47
June 30	Warrants paid and returned	13,014.11
	Total amount expended	$93,266.26
	Balance in Treasury	371.12
		$93,637.38

MANUAL TRAINING FUND

Receipts

1916 July 1	Balance in Treasury................		$ 208.12
	Received from County Treasurer— Taxes:		
July 12	Balance of 1915 taxes, due July 1....	$ 337.73	
Oct. 7	Balance of 1915 taxes, due Oct. 1....	154.60	
Jan. 13	Part of 1916 taxes, due Jan. 1.......	1,197.84	
	Total taxes received............		1,690.17
	Received from State Funds:		
1916 July 15	Industrial Training appropriation....	163.00	
1917 Mch. 22	Industrial Training appropriation....	143.50	
	Total from State...............		306.50
	Received from Clerk:		
July to June	Sales of materials to pupils.....		183.82
	Received from Bank:		
July to June	Interest on daily balances........		17.25
	Total Receipts 1916-17..........		$ 2,405.86

Disbursements

1916 July 31	Warrants paid and returned.........	$ 4.84
Aug. 31	Warrants paid and returned.........	29.14
Sept. 30	Warrants paid and returned.........	127.50
Oct. 31	Warrants paid and returned.........	21.11
Nov. 30	Warrants paid and returned.........	180.18
Dec. 31	Warrants paid and returned.........	52.61
Jan. 31	Warrants paid and returned.........	42.04
Feb. 28	Warrants paid and returned.........	85.13
Mch. 31	Warrants paid and returned.........	70.50
Apr. 30	Warrants paid and returned.........	657.75
May 31	Warrants paid and returned.........	699.98
June 30	Warrants paid and returned.........	327.33
	Total amount expended..........	$ 2,298.11
	Balance in Treasury............	107.75
	Total Disbursements.	$ 2,405.86

INTEREST AND SINKING FUND

Receipts

1916 July 1	Balance in Treasury................		$ 815.83
	Received from County Treasurer:		
July 12	Balance 1915 taxes, due July 1......	$ 1,891.32	
Oct. 7	Balance 1915 taxes, due Oct. 1.......	858.19	
Jan. 13	Part of 1916 taxes, due Jan. 1.......	6,707.96	
	Total amount of Taxes..........		9,457.47
July to June	Interest on daily balances.......		80.96
	Total Receipts 1916-17..........		$10,354.26

Disbursements

1916			
Dec. 31	Warrants paid and returned	$ 2,730.61	
1917			
Apr. 30	Warrants paid and returned	4,000.00	
May 31	Warrants paid and returned	53.36	
June 30	Warrants paid and returned	2,650.61	
	Total amount expended	$ 9,434.58	
June 30	Balance in Treasury	919.68	
			$10,354.26

HIGH SCHOOL AUDITORIUM FUND

Receipts

1916			
July 1	Balance in Treasury		$ 90.00
Oct. 31	From Students	$ 25.00	
Dec. 13	From Interest on Deposits	2.70	
1917			
Apr. 30	From High School Budget Carnival	134.56	
June 30	From Interest on Deposits	2.70	
			164.96
	Total Receipts 1916-17		$ 254.96

Disbursements

1917			
June 30	Balance in Treasury		$ 254.96

PERKINS TRUST FUND

Receipts

1916			
July 1	Balance in Treasury (mortgage)		$ 500.00
	Balance in Treasury (bank)		54.59
Dec. 29	Interest on Loan	$ 15.00	
1917			
June 30	Interest on Loan	15.00	
	Total Interest received		30.00
	Total Receipts 1916-17		$ 584.59

Disbursements

1917			
May 30	Warrants paid and returned	$ 9.00	
June 30	Warrants paid and returned	12.00	
	Total expended		$ 21.00
June 30	Balance in Treasury (mortgage)		500.00
June 30	Balance in Treasury (bank)		63.59
			$ 584.59

PURCHASE AND REPAIR FUND

1917

Jun 30 Warrants presented and not paid for lack of funds.$16,312.98

Bank is carrying these warrants until levy on this fund is collected.

MRS. WHIT A. CHURCHILL,
Treasurer.

The annual report of the Treasurer of the Board of Education has been examined, audited, and is hereby approved by the Auditing Committee of the Board.

U. G. MITCHELL,
Chairman Auditing Committee,
W. S. GRIESA,
MRS. E. L. GRIFFIN,

Auditing Committee of Board of Education.

LAWRENCE, KANSAS, PUBLIC SCHOOLS

CLERK'S REPORT FOR THE FISCAL YEAR ENDING JUNE 30, 1917

GENERAL FUND

Receipts

1916		
July 1	Balance in Treasury	$ 3,253.48
July 12	From County Treasurer, 1915 taxes	3,309.11
July 15	From State Auditor, Normal Training appropriation	162.00
July 31	From bank, interest on deposits	8.24
Aug. 31	From County Treasurer, State Fund	1,564.17
Aug. 31	From tuition W. L. Kiefer and C. C. Kopp, balance due	20.26
Aug. 31	From refund of insurance a/c policy canceled (Old L.)	1.25
Aug. 31	From bank, interest on deposits	8.46
Sept. 29	From tuition	144.50
Sept. 29	From sales of old furnaces and junk	31.02
Sept. 30	From bank, interest on deposits	4.88
Oct. 7	From County Treasurer, balance 1915 taxes	7,426.76
Oct. 31	From bank, interest on deposits	.65
Oct. 31	From tuition	216.80
Oct. 31	From sale of old furnace	15.00
Nov. 28	From tuition	273.00
Dec. 13	From County Treasurer, part of 1916 taxes	20,000.00
Dec. 30	From County Treasurer, part of 1916 taxes	4,000.00
Dec. 29	From tuition	570.00
Dec. 31	From bank, interest on deposits	.24
Jan. 13	From County Treasurer, balance 70% 1916 taxes	33,828.69
Jan. 31	From tuition	2,039.50
Jan. 31	From Santa Fe R. R., damage to safe, $25.00; broken windows, $4.00	29.00
Jan. 31	From bank, interest on deposits	35.25
Feb. 28	From tuition	88.00
Feb. 28	From sale of old books	.50
Feb. 28	From bank, interest on deposits	39.30
Mch. 13	From County Treasurer, State Fund	2,019.38
Mch. 22	From State Auditor, Normal Training appropriation	156.50
Mch. 31	From tuition	53.50
Mch. 31	From bank, interest on deposits	26.81
Apr. 30	From bank, interest on deposits	10.79
May 12	From tuition (part)	600.00
May 31	From tuition (balance)	3.40
May 31	From bank, interest on deposits	.02
June 21	From County Treasurer, part 1916 taxes	13,000.00
June 30	From tuition, balance District No. 81	292.35
June 30	From sale of scrap iron, etc.	91.87
June 30	From bank, interest on deposits	.07
	Total Receipts 1916-17	$93,324.75

Recapitulation of Receipts

July 1, balance on hand		$ 3,253.48
Total amount of taxes received	$81,564.56	
Total amount of State Fund	3,583.55	

Total amount of tuition	4,301.31	
Total amount of Normal Training appropriation	318.50	
Total amount of sales of Junk, etc.	168.64	
Total amount of interest on deposits	134.71	
Total Receipts for Year		90,071.27
Total		$93,324.75

Disbursements

1916-17
July
to
June

High School Teachers' salaries	$16,370.25	
Grade School Teachers' salaries	44,213.50	
Total Teachers' salaries		$60,583.75
Superintendent of Schools	2,502.96	
High School Principal	1,994.67	
Clerk and Purchasing Agent	1,475.00	
Supervisor of Buildings and Grounds	867.50	
Assistant to H. S. Principal	443.00	
Truant Officer	298.00	
Stenographer, Superintendent's Office	257.75	
Treasurer for Board	150.00	
School Nurse (Supervisor of Hygiene)	206.25	
H. S. Library Assistant	72.45	
Total Officers and Clerks		8,267.58
Janitors' salaries (for all buildings)		5,420.57
Coal	3,152.67	
Gas	157.10	
Electricity	376.55	
Total Heat and Light		3,686.32
Supplies for Janitors and Buildings		1,533.88
Printing Annual Report of Board		75.75
Telephone Service and Telegrams		206.22
Printing for Offices and Schools		368.60
Repairs at Buildings (small items)		892.15
Premium on Fire Insurance, Buildings, Furniture		262.70
Sundry small items		81.50
Interest on Warrants		84.66
Enumeration of District (part) (balance taken by School Nurse)		52.01
Traveling Expenses Superintendent to National and other meetings and to secure teachers		138.62
Office Supplies and Postage, High School, Superintendent, and Clerk		651.74
Office Desks for Clerk and Stenographer		80.00
Mimeograph for Offices (Edison Rotary)		65.00
Steel Fireproof Safe for Record and Files		337.92
Equipment for all Buildings		1,941.09
Permanent repairs and improvements.		5,215.13
(Including—Cement walks, additional lighting, new fire escapes and changes, decorating, papering, water proofing walls, plastering rooms,		

painting ridge rolls buildings, increased radiation in Central, Quincy, and High, new boiler for Quincy, etc.)	
New building, North Lawrence, for Ungraded Work	1,192.99
Equipment for Ungraded Room, Quincy and Woodlawn	276.28
A. E. Blair, Architect services Ungraded Building	24.00
W. F. Gernandt, balance due a/c Architect on three new buildings	719.08
A. R. Young & Co., Balance due on Contract three new buildings	118.85
Expenses a/c High School Commencement (Rent of Bowersock Theatre, Programs, etc.)	80.55
Improvement Taxes-Paving	596.69
Total Expenditures	$92,953.63
Balance in Treasury	371.12
Total	$93,324.75

Recapitulation of Expenditures.

Total Amount spent for Salaries	$74,271.90
Total Amount for Maintenance and Supplies	7,620.81
Total Amount for Repairs and Improvements	6,107.28
Total Amount for Architect's Services	743.08
Total Amount for New Buildings and Equipment	3,529.21
Total Amount paid to Bank Interest on Overdraft	84.66
Total Amount Improvement Taxes—Paving	596.69
	92,953.63
Balance in Treasury	371.12
Total	$93,324.75

MANUAL TRAINING FUND.

Receipts.

1916			
July 1	Balance in Treasury		$ 208.12
July 12	From County Treasurer, 1915 taxes	$ 337.73	
Oct. 7	From County Treasurer, 1915 taxes, balance	154.60	
Jan. 13	From County Treasurer, 1916 taxes	1,197.84	
	Total Amount Taxes Received		1,690.17
July 15	From State Auditor Industrial Training Appropriation	$ 163.00	
Mch. 22	From State Auditor Industrial Training Appropriation	143.50	
	Total State Appropriation		306.50
July to June	From sales of Material to Pupils		183.82
	Bank Interest on Deposits		17.25
	Total Receipts		$ 2,405.86

Disbursements.

July to June	For Teachers' Salaries, Industrial Training	$ 1,436.25	
	Supplies for Domestic Science	344.20	
	Supplies for Shops	517.66	
	Total Expenditures		$ 2,298.11
	Balance in Treasury June 30, 1917		107.75
			$ 2,405.86

INTEREST AND SINKING FUND.

Receipts.

1916			
July 1	Balance in Treasury		$ 815.83
July 12	From County Treasurer, 1915 taxes	$ 1,891.32	
Oct. 7	From County Treasurer, 1915 taxes, balance	858.19	
Jan. 13	From County Treasurer, 1916 taxes	6,707.96	
	Total Taxes Received		9,457.47
July to June	From Bank Interest on Deposits		80.96
	Total Receipts		$10,354.26

Disbursements.

1916			
Dec. 4	Interest due on bonds, Jan. 1, 1917	$ 2,730.61	
Apr. 2	Bonds due May 1, 1917	4,000.00	
May 7	Interest due on Bonds, May 1, 1917	53.36	
June 4	Interest due on Bonds, July 1, 1917	2,650.61	
	Total Expenditures		$ 9,434.58
	Balance in Treasury		919.68
			$10,354.26

HIGH SCHOOL AUDITORIUM FUND.

Receipts.

1916		
July 1	Balance in Treasury	$ 90.00
Oct. 31	From High School Pupils	25.00
Dec. 13	Douglas County Building & Loan Association, 6 Months' Interest	2.70
Apr. 30	High School Budget Staff Carnival	134.56
June 30	Douglas County Building & Loan Association, 6 Months' Interest	2.70
		$ 254.96

Disbursements.

June 30	Balance in Treasury & Douglas County Building & Loan Association	$ 254.96

PERKINS TRUST FUND.

Receipts.

1916			
July 1	Balance Amounts Invested in (Farm Mortgage) (Wilder S. Metcalf Agency)		$ 500.00
July 1	Balance Cash in Treasury (Bank)		54.59
Dec. 29	Received Interest on Loan	$ 15.00	
June 30	Received Interest on Loan	15.00	
			30.00
	Total Receipts for 1916-17		$ 584.59

Disbursements.

1917			
May 7	Paid to J. L. Sellers for Debating Pins	$ 9.00	
June 4	Paid to F. H. Olney for H. S. English Prizes	12.00	
	Total Expended		$ 21.00
June 30	Balance in Treasury (Bank)		63.59
June 30	Balance (Invested in Mortgage)		500.00
			$ 584.59

PURCHASE AND REPAIR FUND.

Receipts.

1916

June 20 No receipts as yet. A tax of 1½ mills has been levied to purchase a site for a new high school building and to make a lot of repairs and changes in Central building.

Disbursements.

June 20 Amount paid for high school site, which is the 1400 block between New Hampshire and Massachusetts streets. $16,312.98

These warrants are being carried by the Lawrence National Bank at 6% interest until taxes levied are collected.

CLERK'S REPORT.

Amount Expended Each Month of the Fiscal Year 1916-17.

	General Fund	Manual Training Fund	Interest Sinking Fund	Perkins Trust Fund	Purchase Repair Fund	Total all Funds
July	$ 893.54	$ 4.84	$.......	$.....	$.........	$ 898.3
August	1,367.56	29.14	....	......	....	1,396.7
September	4,834.06	127.50	....	......	....	4,961.5
October	9,588.70	21.11	....	......	....	9,609.8
November	9,140.53	180.18	....	......	....	9,320.7
December	14,452.03	52.61	2,730.61	......	....	17,235.2
January	2,322.82	42.04	....	......	....	2,364.8
February	10,072.18	85.13	....	......	....	10,157.3
March	10,335.91	70.50	....	......	....	10,406.4
April	9,035.98	80.25	4,000.00	......	....	13,116.2
May	16,239.20	1,277.48	53.36	21.00	....	17,591.0
June	4,671.12	327.33	2,650.61	......	16,312.98	23,962.0
Totals	$92,953.63	$2,298.11	$9,434.58	$21.00	$16,312.98	$121,020.3

TUITION ACCOUNT.

Receipts

1916		
August, Collected from Pupils	$ 24.26	
September	144.50	
October	234.80	
November	273.00	
December	570.00	
January	2,039.50	
February	88.00	
March	66.50	
April	61.00	
May	613.40	
June	292.35	
Total Amount Collected		$4,407.31

Disbursements.

1916			
Aug. 25	To Abbie Morton, left school one month early	$ 4.00	
Oct. 19	Nina Auchard, sick, could not attend	18.00	
Mch. 13	Alta Heim, left five weeks after beginning	13.00	
Apr. 30	Lillian Mayer, a/c property attached to District	18.00	
Apr. 30	Wilma Mayer, a/c property attached to District	18.00	
Apr. 24	Lalia Pulley, a/c property attached to District	10.00	
Apr. 24	Marjorie White, a/c property attached to District	25.00	
	Total Refunded		106.00
August to June	Amount paid to Treasurer		4,301.31
			$4,407.31

PETTY CASH ACCOUNT.

Receipts.

1916			
July 1	Balance Cash in Drawer		$ 13.32
July 2	Emergency Warrant Received	$25.00	
Aug. 8	Emergency Warrant Received	50.00	
Sept. 4	Emergency Warrant Received	50.00	
Oct. 3	Emergency Warrant Received	50.00	
Nov. 7	Emergency Warrant Received	50.00	
Dec. 5	Emergency Warrant Received	50.00	
Jan. 2	Emergency Warrant Received	50.00	
Feb. 5	Emergency Warrant Received	50.00	
Mch. 6	Emergency Warrant Received	50.00	
Apr. 3	Emergency Warrant Received	50.00	
May 7	Emergency Warrant Received	50.00	
June 2	Emergency Warrant Received	50.00	
	Total Receipts 1916-17		575.00
			$588.32

Disbursements.

July	Paid for Sundry Items, Receipts No. 277-291	$12.91	
August	Paid for Sundry Items, Receipts No. 292-315	35.66	
September	Paid for Sundry Items, Receipts No. 316-337	63.72	
October	Paid for Sundry Items, Receipts No. 338-367	38.13	
November	Paid for Sundry Items, Receipts No. 368-401	63.94	
December	Paid for Sundry Items, Receipts No. 402-423	40.71	
January	Paid for Sundry Items, Receipts No. 424-467	65.45	
February	Paid for Sundry Items, Receipts No. 468-500	49.24	
March	Paid for Sundry Items, Receipts No. 501-531	44.65	
April	Paid for Sundry Items, Receipts No. 532-572	64.91	
May	Paid for Sundry Items, Receipts No. 573-622	51.85	
June	Paid for Sundry Items, Receipts No. 623-656	47.82	
	Total Amount Expended		578.99
	Balance Cash in Drawer		9.33
			$588.32

Bonded Indebtedness.

July 1, 1917, the school bonds outstanding against School District No. 60, Lawrence, Kansas, are as follows:

Central School	$ 8,000.00
$ 4,000 due May 1, 1918	
4,000 due May 1, 1919	
Manual Training School	40,000.00
$ 4,000 due May 1, 1920	
4,000 due May 1, 1921	
4,000 due May 1, 1922	
4,000 due May 1, 1923	
4,000 due May 1, 1924	
5,000 due May 1, 1925	
5,000 due May 1, 1926	
5,000 due May 1, 1927	
5,000 due May 1, 1928	
Cordley, Lincoln and McAllaster Schools	75,000.00
$ 2,000 due July 1, 1925	
2,000 due July 1, 1926	
3,000 due July 1, 1927	
3,000 due July 1, 1928	
10,000 due July 1, 1929	
10,000 due July 1, 1930	
10,000 due July 1, 1931	
11,000 due July 1, 1932	
12,000 due July 1, 1933	
12,000 due July 1, 1934	
Total Bonded Indebtedness	$123,000.00

E. B. CRONEMEYER, Clerk.

The annual report of the Clerk of the Board of Education for the fiscal year closing June 30, 1917, has been examined and audited and is hereby approved by the Auditing Committee of the Board.

U. G. MITCHELL,
Chairman Auditing Committee,
W. S. GRIESA,
MRS. E. L. GRIFFIN,
Auditing Committee of the Board of Education.

PUBLIC SCHOOLS OF LAWRENCE, KANSAS

SUPERINTENDENT'S REPORT

INTRODUCTION.

In writing this report use has frequently been made of the Superintendent's monthly reports for the past year. The writer is indebted for collection of statistical data to the following members of his university classes:

Glenn DeLay, A. K. Loomis, W. J. Warren, Olin Darby, H. D. Fisk, C. L. Thomas and Josie Trinkle for the data covering the survey of the grade buildings; to W. W. Van Slyck and J. A. Hensley for the data covering the survey of the school buildings; to W. J. Warren for the data on failures by subjects; to John A. Jeffries for the distribution of school expenditures; to W. O. Steen for most of the data concerning the teaching staff; and to Mary Schenk for the arithmetic tests.

The schools are indebted to the daily press of the city for the publicity which has been so freely given to reports and other information which it has seemed desirable to make public.

It is not frequent that one finds a community so interested in its schools and so anxious for the best educational privileges for its children as is to be found in Lawrence. The continuous expression of such an attitude is the surest guarantee of the progress of a community's schools. The Board of Education has consistently and solicitously done its part to insure good schools for the city.

Lawrence, Kansas,
Aug. 1, 1917.

To the Members of the Board of Education, Lawrence, Kansas:

I take pleasure in submitting to you the fiftieth annual report of the Lawrence Public Schools.

ANNUAL STATISTICAL REPORT.

1. How many children were enrolled in the elementary schools?

White	Males....... 792	Females........559	Total........1,351
Colored	Males....... 319	Females........175	Total........ 494
Totals	Males.......1,111	Females........734	Total........1,845

2. How many days did these children attend school?

White	Males.....517,968	Females.....345,462	Total......863,430
Colored	Males..... 39,556	Females..... 26,600	Total...... 66,156
Totals	Males.....557,524	Females.....372,062	Total......929,586

3. What was the average daily attendance?

White	Males........654	Females........618	Total........1,272
Colored	Males........124	Females........152	Total........ 276
Totals	Males........778	Females........770	Total........1,548

4. How many children were enrolled in the High School?

White	Males........273	Females........350	Total.........623
Colored	Males........ 24	Females........ 45	Total......... 69
Totals	Males........297	Females........395	Total.........692

5. How many days did these attend school?

White	Males......38,354	Females......43,855	Total.......82,209
Colored	Males...... 3,434	Females...... 5,903	Total....... 9,337
Totals	Males......41,788	Females......94,758	Total.......91,546

6. What was the average daily attendance?

White	Males........222	Females........311	Total.........533
Colored	Males........ 20	Females........ 34	Total......... 54
Totals	Males........242	Females........345	Total.........587

7. How many pupils enrolled resided in rural districts?

White	Males.........27	Females.........52	Total..........79
Colored	Males......... 2	Females......... 2	Total.......... 4
Totals	Males.........29	Females.........54	Total..........83

8. What was the enrollment in each grade in each building?

	I				II				III				IV				V				VI				VII				VIII				Total
	White		Col.		White		Col.		White		Col.		White		Col.		White		Col.		White		Col.		White		Col.		White		Col.		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Central	...	...	..	..	...	..	..	..	..	..	..	..	..	..	..	..	...	..	..	..	19	14	1	2	96	94	15	12	71	86	10	24	444
Cordley	14	13	18	14	10	13	12	20	11	8	14	9	11	9	13	10	8	11	11	13	...	...	..	..	..	..	..	..	..	..	..	..	242
Lincoln	0	0	10	10	0	0	4	5	0	0	5	9	0	0	8	3	0	0	7	9	0	0	12	6	..	..	..	..	..	..	..	..	88
McAllaster	12	18	3	2	12	6	2	2	17	12	1	2	14	9	3	1	17	9	3	1	...	...	..	..	..	..	..	..	..	..	..	..	146
New York	12	12	10	11	24	8	5	5	14	21	0	5	12	9	3	8	16	14	2	8	27	22	17	14	..	..	..	..	..	..	..	..	279
Pinckney	18	12	0	3	24	21	2	2	21	15	11	14	23	16	15	18	25	25	8	5	23	30	0	1	..	..	..	..	..	..	..	..	332
Quincy	17	9	0	0	12	15	0	0	10	9	6	4	15	20	1	1	18	17	0	0	28	25	0	4	..	..	..	..	..	..	..	..	211
Woodlawn	22	15	0	0	23	21	0	0	20	17	0	0	14	22	0	0	16	16	0	0	11	12	0	0	..	..	..	..	..	..	..	..	209
Grade Totals	95	79	41	40	105	84	25	34	93	82	37	43	89	85	43	41	100	92	31	36	108	103	30	27	96	94	15	12	71	86	10	24	1,951
High School	273	350	24	45	...	..	..	..	..	..	..	..	..	..	..	..	...	..	..	..	...	...	..	..	..	..	..	..	..	..	..	..	692
Grand Total	...	...	..	..	...	..	..	..	..	..	..	..	..	..	..	..	...	..	..	..	...	...	..	..	..	..	..	..	..	..	..	..	2,643

9. How many children were neither absent nor tardy during the whole year?

SCHOOL	Not Absent		Not Tardy		Neither Abs't nor Tardy	
	No.	Per Cent of Enrol.	No.	Per Cent of Enrol.	No.	Per Cent of Enrol.
Central	27	6	360	81	27	6
Cordley	18	17	102	94	18	17
Lincoln	8	9	59	67	5	6
McAllaster	10	7	116	85	11	8
New York	24	12	......	....	22	11
Pinckney	28	11	258	100	23	9
Quincy	20	9	178	81	20	9
Woodlawn	14	6	151	63	13	6
High School	144	23	479	77	108	17

10. What does the last school census show?

Males		Females		Total	
White	1,224	White	1,240	White	2,464
Colored	208	Colored	227	Colored	435
Mexican	10	Mexican	15	Mexican	25
Indian	6	Indian	1	Indian	7
Total Males	1,448	Total Females	1,483	Total	2,931

Compared with last year's report:

	White Male	White Female	Colored Male	Colored Female	Mexican Male	Mexican Female	Indian Male	Indian Female	Total
1916	1274	1277	201	239	7	10	4	2	3014
1917	1224	1240	208	227	10	15	6	1	2931
More	......	......	7	......	3	5	2	......	......
Less	50	37	......	12	......	......	......	1	83

11. What were the conditions last year with regard to truancy?

In order that a better check might be kept on each case of truancy and also that the facts concerning each case investigated might be put into a permanent record, a report blank was adopted. This provided a record for the principal on each case reported and reports of the same case to the superintendent from both the principal and the truant officer. The use of these blanks made it possible to keep a careful check on all truancy work. These reports were used from December 1 to the end of the school year.

The number of children truant in each school per month, together with the number of individual cases of truancy similarly distributed, is shown in the table below. After a child is reported twice as truant, this constitutes two cases of truancy, but only one child truant.

SCHOOL	No. of Children Per Month	No. of Cases of Truancy
Central—		
January	1	1
February	1	1
March	3	4
April	1	1
May	1	1
	7	8
Cordley—		
December	1	1
January	5	5
February	2	2
March	2	2
April	1	1
	11	11
Lincoln—		
January	1	1
March	5	5
April	2	2
May	1	1
	9	9
McAllaster—		
April	2	3
May	4	4
	6	7
New York—		
January	2	2
February	3	3
April	3	3
May	2	2
	10	10
Pinckney—		
December	1	1
January	5	5
March	8	9
April	3	3
May	3	3
	20	21
Quincy—		
December	2	2
April	1	3
	3	5
Woodlawn—		
December	5	5
January	13	15
February	5	6
March	7	8
April	9	11
May	5	5
	44	50

The data in the above table are shown again in the table below, which enables us to determine the total number of cases of truancy per month:

	Dec.	Jan.	Feb.	Mch.	Apr.	May	Total
Central	......	1	1	4	1	1	8
Cordley	1	5	2	2	1	......	11
Lincoln	......	1	5	2	1	......	9
McAllaster	......	......	......	......	3	4	7
New York	......	2	3	3	2	......	10
Pinckney	1	5	......	9	3	3	21
Quincy	2	......	......	......	3	......	5
Woodlawn	5	15	6	8	11	5	50
Totals	9	29	17	28	25	13	121

The number of times that each child was reported as truant is shown in the following table:

Number of children reported once	64
Number of children reported twice	14
Number of children reported three times	3
Number of children reported four times	1
Number of children reported five times	2
Number of children reported six times	1
Total	85

12. What have been the school enrollment and number of teachers in Lawrence for the last ten years?

During the last ten years the enrollment of the public schools has been distributed according to the table below. This table shows also the total number of teachers in both the elementary schools and the High School.

Year	Total Enrol.	H. S. Enrol.	No. H. S. Teachers	Pupils Per Teacher	Grade Enrol.	Grade Teachers	Pupils Per Teacher
1896-1897	2579	452	10	45.2	2127	38	....
1899-1900	2643	448	12	37.3	2195	38	57.7
1900-1901	2649	482	*	....	2167	*	....
1908-1909	2524	575	16	36	1949	41	47.5
1910-1911	2629	621	16	38.8	2008	41	49
1911-1912	2617	637	19	33.5	1980	44	45
1913-1914	2651	671	23–4	....	1980	*	....
1914-1915	2643	691	*	....	1952	*	....
1915-1916	2633	722	23–5	....	1911	*	....
1916-1917	2537	692	24–5	23	1845	61	30.2

Second figure under number of high school teachers indicates part time instructors.

*Data not on file.

(Records are not available for the years omitted.)

Of the 452 enrolled in the High School in 1896-7, 121 were special students taking less than full work. There were from 90 to 100 of these specials for several years before the Oread School was opened at Kansas University. There are practically none now.

13. What do these figures show?
    1. A gradual, steady increase in high school enrollment.
    2. A steady decrease in the pupils per teacher in the High School.
    3. A slight decrease in grade enrollment.
    4. An increase in the number of grade teachers.
    5. Present conditions in the High School are about standard.

14. What were some of the grade enrollment conditions during the year just closed?

4 rooms enrolled 30 pupils each
3 rooms enrolled 27 pupils each
2 rooms enrolled 25 pupils each
2 rooms enrolled 24 pupils each
3 rooms enrolled 23 pupils each
1 room enrolled 22 pupils
1 room enrolled 20 pupils
—
16 rooms enrolled not over 30 pupils each

In the Central School, with departmental work, there were from 38 to 43 pupils in each class.

15. What was the enrollment per teacher by buildings?

Quincy	Pinckney	New York	Wood-lawn	Cordley	McAllaster	Lincoln
27	44	25	23	24	30	25
30	37	36	35	23	27	20
35	41	40	36	23	34	17
34	43	32	38	32	22	25
30	31	40	44	32	35	....
25	45	32	37	....	....	....
27	30	24	....	....	....	....
....	20	32	....	....	....	....

Central—Departmental work: 38 to 43.

16. What was the number of children actually in daily attendance per teacher?

Only 14 rooms in all the grade buildings outside Central had an average daily attendance of 30 pupils or more. Thirty rooms had an attendance averaging between 20 and 30 pupils daily, and 10 rooms had 20 or less pupils in attendance each day. The complete data on this is:

In 3 rooms the average daily attendance was 17 pupils.
In 3 rooms the average daily attendance was 18 pupils.
In 4 rooms the average daily attendance was 20 pupils.
In 3 rooms the average daily attendance was 21 pupils.
In 2 rooms the average daily attendance was 22 pupils.
In 1 room the average daily attendance was 23 pupils.
In 2 rooms the average daily attendance was 24 pupils.
In 2 rooms the average daily attendance was 26 pupils.
In 3 rooms the average daily attendance was 27 pupils.
In 4 rooms the average daily attendance was 28 pupils.

In 2 rooms the average daily attendance was 29 pupils.
In 1 room the average daily attendance was 30 pupils.
In 5 rooms the average daily attendance was 31 pupils.
In 3 rooms the average daily attendance was 32 pupils.
In 1 room the average daily attendance was 33 pupils.
In 1 room the average daily attendance was 34 pupils.
In 1 room the average daily attendance was 38 pupils.
In 1 room the average daily attendance was 39 pupils.
In 1 room the average daily attendance was 40 pupils.

17. What caused this small number of children per teacher?

There are at least two reasons: First, a desire to decrease the large enrollment per teacher that formerly prevailed; second, the opening of two additional buildings, the Cordley and the McAllaster, and the placing of additional teachers and grades in them. The desire and move to improve conditions of teaching by decreasing crowded schools is to be highly commended. It has reached the point, however, where its further progress should be a leveling out between small and large enrollments rather than a movement to set up more privileges by increasing the number of grades maintained. The difference in enrollment per teacher at the Central and at the Cordley or the Lincoln is, to put it mildly, very striking.

18. What has been done to improve this situation?

1. An Intermediate School will be in operation at Central next year with a fairly adequate number of teachers provided.
2. By consolidation of a grade with small enrollment in two or three adjoining districts, one teacher less will be employed next year at the McAllaster, one at the New York; and by a reorganization of work, one less at the Lincoln. This reorganization consists in having straight year classes instead of A and B divisions in each grade. This will give the Lincoln School one entering class each year instead of two.

19. How was the grade work distributed among the schools last year?

	Grades Maintained							
	Central	Cordley	Lincoln	McAllaster	New York	Pinckney	Quincy	Woodlawn
First Term.	6, 7, 8	1 to 4	1 to 6	1 to 4	1 to 6	1 to 6	1 to 6	1 to 6
Second Term.	6, 7, 8	1 to 5	1 to 6	1 to 5	1 to 6	1 to 6	1 to 6	1 to 6

20. How will the grade work be distributed next semester?

Central	Cordley	Lincoln	McAllaster	New York	Pinckney	Quincy	Woodlawn
7, 8	1 to 4	1 to 6	1, 2, 3, 5	1, 3 to 6	1 to 6	1 to 6	1 to 6

21. In what proportion does Lawrence apportion school money among the several expense items?

In the Clerk's and Treasurer's reports are given itemized statements of receipts and disbursements. From the standpoint of business administration these reports are absolutely essential. From the standpoint of educational administration it is just as essential to know how the total fund is spent as compared with certain well-defined standards.

The distribution of the total expenditures of the school district according to the proportionate amount devoted to certain standard items is shown in the following table:

Item	Lawrence Spends	Standard Expenditures
Supervision	7.7%	7% to 10%
Teachers' Salaries	64 %	60% to 68%
Janitors' Salaries	5.8%	5% to 7%
Fuel	3.9%	5% to 7%
Repairs	5 %	3% to 5%

22. What do these figures show?

1. On the whole the city's distribution of school money is fairly satisfactory.
2. Lawrence is spending too little for supervision, for in reality the amount spent for supervision is actually considerably less than the per cent here credited to it.
3. We are spending a fair amount of the total for teachers' salaries. This item should not be confused with the salary per teacher. The two are quite separate items.
4. We are spending rather a low percentage of the total on janitors' salaries.
5. We are spending below the standard ratio on fuel. This is due partly, at least, to the lack of ventilation equipment and its upkeep, the cost of which upkeep would be charged to fuel.
6. Lawrence spends the standard maximum for repairs. This is for three main reasons:
    1. Six of the ten buildings are old and in need of constant repair.
    2. During the past year the Board has made extra effort to improve the general condition of the buildings for school purposes.
    3. The improvement of fire hazards has been one large source of repair cost.

23. What probable future demands will those several items make upon Lawrence?

1. More money must be spent for supervision or else the schools will deteriorate.
2. Teachers' salaries cannot be lessened. It is only to be expected that they will rise, even though certain economies in enrollment can be effected.
3. Janitors' salaries also will probably increase, since wages everywhere are on the rise.
4. The cost of fuel will depend upon the market price of coal.
5. The amount paid for repairs probably will not be lessened, but rather increased, until new buildings replace some of the old ones.

24. What changes will this necessitate in the Lawrence budget?

The distribution of school money among the several items may be changed little. It is certain, though, that a larger total amount of money will be needed. In connection with the discussion of salaries some data are given concerning the decreased purchasing power of a dollar. Practically every marketable commodity is from a few to hundreds of per cent higher in cost than it was three, two years, or even one year ago.

25. How does the high cost of living affect the schools?

Since they live on marketable commodities—lumber, iron, paper, coal, gas, wages and numerous other items—the schools can be maintained only by buying as much of these commodities as finances will allow in the light of legitimate needs. That community which expects its schools to operate in 1918 for what they did in 1916 or even 1917 is expecting the impossible. It is expecting its school board to do what its housewives and business men find it impossible to do. The schools will be hampered seriously if the community does not increase the schools' financial support. This fact need only to be stated to be self-evident to any man or woman who does any buying at all.

The last session of the Kansas Legislature passed no act of greater significant value to the educational interests of the state than the act authorizing cities of the first and the second class to increase the levy for public school support. The Lawrence Board of Education performed only an obvious duty when it took advantage of this act in fixing the tax levy for the coming school year.

CHILD PROGRESS.

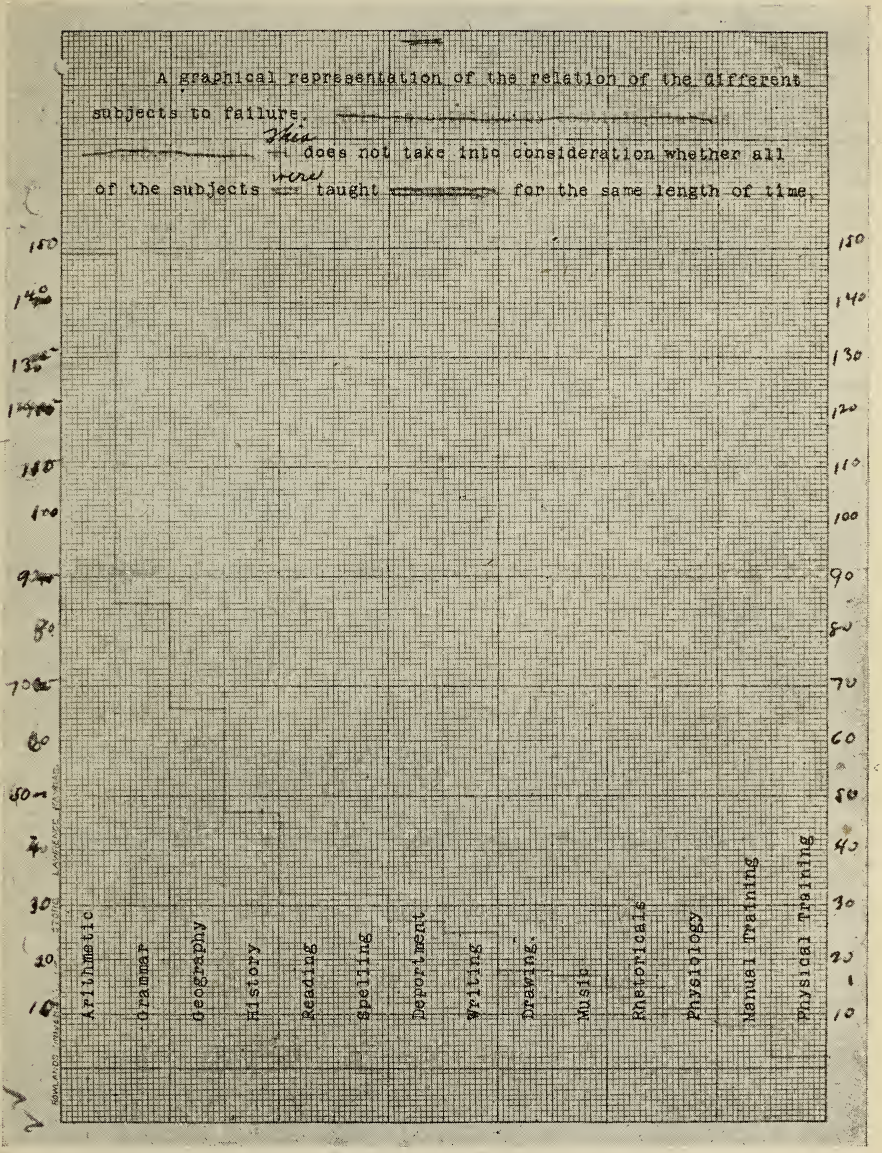
26. How many children failed of promotion? How many children skipped a grade?

Reports from the several buildings give the following answer covering the last school year:

School	Failures	Special Promotions
Central	35	0
Cordley	12	6
Lincoln	5	2
McAllaster	13	11
New York	14	11
Pinckney	47	13
Quincy	11	7
Woodlawn	35	4
Total	172	54

27. In what subjects do children make the most failures?

For Lawrence this can be answered at present for children in only the seventh and eighth grades. The children in these grades were selected merely because the facts desired were available for them and were not for any others.



A graphical representation of the relation of the different subjects to failure. This does not take into consideration whether all of the subjects were taught for the same length of time.

The above figure shows where some of the children who were last year enrolled in the seventh and eighth grades failed in their school work. These failures are not limited to these two years of work. All the records available for these children, covering previous grades, are included. The figure does not take into account the length of time that any subject was taught, but merely the per cent of failures in each subject. It shows that where 149 failures occurred in arithmetic, 86 occurred in grammar, 66 in geography, etc., until we come to physical training with only 2. The chances of a child's failing in grammar were only half as great as his failing in arithmetic; in geography less than two-fifths as great; in history about one-third as great; and so on.

28. Is Lawrence peculiar in this respect?

A recent investigation of the causes of failure of pupils of the sixth, seventh, and eighth grades of the Baltimore Schools shows the following results:

	Arith.	Eng.	Hist.	Geog.	Alg.	Latin	Germ'n	Total by Grades
Sixth.	149	100	6	8	0	....	....	263
Seventh . .	188	126	28	30	0	....	....	372
Eighth.....	62	51	17	4	46	10	12	202
Total..	399	277	51	42	46	10	12	837

PERCENTAGE OF FAILURE BY SUBJECTS.

	Sixth	Seventh	Eighth
Mathematics.	56	50	53
English.	38	33	36
Geography.	3	8	1
History.	2	7	8

This comparison tends to show that the subjects which have most failures in Lawrence have most failures in Baltimore.

29. What do we know of failures for all the children?

The grade distribution table gives us the answer. This table was compiled in September, 1916.

Birth Between These Dates		1st		2d		3rd		4th		5th		6th		7th		8th	
		B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
August 1, 1911, to	Boys	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
January 31, 1912	Girls	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
February 1, 1911, to	Boys	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
July 31, 1911	Girls	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
August 1, 1910, to	Boys	21	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
January 31, 1911	Girls	22	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..
February 1, 1910, to	Boys	24	8	2	..	..	..	..	..	..	..	..	..	..	..	..	..
July 31, 1910	Girls	19	8	2	..	..	..	..	..	..	..	..	..	..	..	..	..
August 1, 1909, to	Boys	8	18	15	3	1	1	..	..	..	..	..	..	..	..	..	..
January 31, 1910	Girls	10	19	10	5	3	..	1	..	..	..	..	..	..	..	..	..
February 1, 1909, to	Boys	9	16	24	6	3	..	..	..	..	..	..	..	..	..	..	..
July 31, 1909	Girls	5	14	18	5	4	..	..	..	..	..	..	..	..	..	..	..
August 1, 1908, to	Boys	2	12	12	15	13	1	1	..	..	..	..	..	..	..	..	..
January 31, 1909	Girls	3	10	10	14	10	1	..	..	..	..	..	..	..	..	..	..
February 1, 1908, to	Boys	..	..	4	9	14	3	..	..	..	..	..	..	..	..	..	..
July 31, 1908	Girls	1	1	5	7	20	3	..	..	..	..	..	..	..	..	..	..
August 1, 1907, to	Boys	1	2	3	3	10	13	7	4	2	..	..	..	..	..	..	..
January 31, 1908	Girls	2	2	8	4	17	14	8	1	15	..	..	..	..	..	..	..
February 1, 1907, to	Boys	1	2	4	4	10	9	10	3	4	..	..	..	..	..	..	..
July 31, 1907	Girls	..	..	2	5	7	11	7	7	5	..	..	..	..	..	..	..
August 1, 1906, to	Boys	..	..	1	1	1	5	10	13	16	3	2	1	..	..	..	..
January 31, 1907	Girls	..	..	..	2	7	2	17	9	8	4	4	..	..	..	..	..
February 1, 1906, to	Boys	..	..	2	2	3	6	9	12	10	5	2	..	1	..	..	..
July 31, 1906	Girls	..	..	..	1	5	2	9	2	14	10	3	..	1	..	..	..
August 1, 1905, to	Boys	..	..	..	2	2	1	8	6	10	5	7	3	3	..	..	..
January 31, 1906	Girls	..	..	1	1	..	1	4	9	7	6	10	2	5	1	..	..
February 1, 1905, to	Boys	..	..	..	..	..	1	3	5	8	7	13	1	1	..	..	..
July 31, 1905	Girls	..	..	..	1	1	..	2	3	11	8	21	4	2	..	..	..

August 1, 1904, to	Boys	.	.	.	1	1	1	4	3	6	8	13	6	11	..	..	..
January 31, 1905	Girls	..	..	..	..	1	2	2	1	10	4	7	5	13	2	..	..
February 1, 1904, to	Boys	..	..	..	..	..	..	3	2	8	6	8	9	12	3	3	..
July 31, 1904	Girls	..	..	1	..	..	..	2	..	3	5	7	4	8	2	2	..
August 31, 1903, to	Boys	..	..	..	..	..	..	2	1	6	4	4	5	14	6	6	1
January 31, 1904	Girls	..	..	..	..	..	..	3	1	1	4	6	6	16	6	13	2
February 1, 1903, to	Boys	..	..	..	..	..	..	3	5	6	4	3	5	8	5	10	2
July 31, 1903	Girls	..	..	..	..	..	..	1	..	2	3	1	3	12	12	12	4
August 1, 1902, to	Boys	..	..	..	..	..	..	1	..	1	3	2	6	9	5	9	8
January 31, 1903	Girls	..	..	..	..	..	..	..	1	1	1	2	3	6	3	9	5
February 1, 1902, to	Boys	..	..	..	..	..	1	..	1	1	1	3	..	3	2	7	3
July 31, 1902	Girls	..	..	..	..	..	1	..	1	1	..	1	3	4	3	15	9
August 1. 1901, to	Boys	..	..	..	..	..	..	..	..	2	1	4	1	6	4	4	5
January 31, 1902	Girls	..	..	..	..	..	..	..	..	..	..	1	..	1	2	7	7
February 1, 1901, to	Boys	..	..	..	..	..	..	1	..	..	..	1	..	3	3	6	5
July 31, 1901	Girls	..	..	..	..	..	..	..	..	..	..	1	..	1	3	3	5
August 1, 1900, to	Boys	..	..	..	..	..	..	..	..	..	..	..	2	2	1	1	5
January 31, 1901	Girls	..	..	..	..	..	..	..	1	..	..	2	..	..	1	5	..
February 1, 1900, to	Boys	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2
July 31. 1900	Girls	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3
August 1, 1899. to	Boys	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
January 31, 1900	Girls	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
February 1, 1899, to	Boys	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
July 31, 1899	Girls	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4

	I	II	III	IV	V	VI	VII	VIII
Accelerated.No	15	13	14	7	33	17	15	8
%	5.9	6	6.6	3.6	13.2	8.6	7.2	4.3
Normal. . . .No	223	161	161	123	137	127	136	124
%	87.5	74	75.6	63.4	54.8	64.1	65.7	66.3
Retarded. . .No	17	42	37	64	80	54	56	55
%	6.7	19.9	17.3	32.9	32	27.3	27	29.4
Total.	255	216	213	194	250	198	207	187

These facts are more easily seen in the following summary of the above table:

PERCENT OF PUPILS.

	Retarded	Normal	Accelerated
Lawrence—Total	23.2	69	7
Grade I	6.7	87.5	5.9
Grade II	19.9	74	6
Grade III	17.3	75.6	6.6
Grade IV	32.9	63.4	3.6
Grade V	32	54.8	13.2
Grade VI	27.3	64.1	8.6
Grade VII	27	65.7	7.2
Grade VIII	29.4	66.3	4.3

30. What is the retardation in each building?

School	Number of Years Retarded					Accelerated
	2	3	4	5	6	
	Number of Children					
Central	30	12	......	......	......	31
Cordley	2	3	......	......	......	16
Lincoln	7	3	2	1	1	4
McAliaster	3	......	......	2	......	9
New York	25	12	3	......	......	4
Pinckney	5	2	2	1	......	24
Quincy	14	3	......	......	......	31
Woodlawn	17	14	4	......	1	1

The above table shows the distribution of children, each of whom was retarded two or more years when the above age grade distribution table was made.

31. Have we any basis of comparison in this matter?

Last year the Bureau of School Service of the School of Education of Kansas University collected similar data from twelve other cities in Kansas. These are given with Lawrence added for purpose of comparison:

PERCENT OF CHILDREN.

Twelve Kansas Cities

City	Retarded	Accelerated
P.	12.8	18.5
L.	21.0	9.5
S.	25.5	6.2
H.	26.7	9.0
E.	28.3	7.5
F.	31.8	4.3
K.	32.5	7.3
O.	37.4	2.3
C.	37.7	3.0
Q.	41.1	1.4
N.	47.9	.8
D.	48.2	1.5
Average of 12 cities	30.6	6.7
Proper (estimated)	15.0	15.0
Lawrence	23.2	7.

32. What does the comparison show?

Lawrence is in better condition in this respect than ten of the twelve other Kansas cities. At the same time she has less than one-half as many children ahead of their grade as the estimated proper proportion, and three children retarded where she ought, by this estimate, to have two.

33. What has been done to improve this situation?

First. Teachers have been encouraged to make special promotions, to put ahead one grade those individual children who show themselves able to do the required work. The number of such promotions made during the year has already been shown on page 22. During the past year there were nearly one-third as many cases of special promotions as there were cases of failure in the grades.

Second. Soon after the beginning of the second semester two ungraded rooms were opened, one at the Woodlawn School on the north side, and one at the Quincy School on the south side.

Before these rooms were opened the nature of the work to be done, the reasons why it was to be done and the results to be reasonably expected from it were explained to the patrons of the schools through public meetings and through teachers and officials of the schools making personal visits to parents and patrons. The result was that the work was begun and operated until the end of the year without a single objection being raised. This is a remarkable record, and the credit for it is due to the attitude of the Board of Education, of the teachers whom it affected, and of the people at large as well as of the parents of the children whom it affected. In this connection, Lawrence is greatly indebted to the Topeka Public Schools who, through their superintendent, Mr. H. B. Wilson, lent the services of their supervisor of ungraded work, Miss Ellen Heartburg, for one semester.

From the time the rooms were opened there were more children whose parents desired them to be enrolled in the rooms than the rooms could accommodate. The tangible results of the semester's work are that approximately one-half of the thirty children in both these rooms will be returned to regular grade work soon after the opening of school next fall and will do their work in the grade above that from which they entered the ungraded work.

Third. An Intermediate School will be opened next September. One of the results reasonably to be expected from this school is that retardation in the upper grades will be decreased.

34. How well do Lawrence school children know the subjects they study?

The answer to be given to this question should not be based upon mere personal judgment or opinion. It need not be left to any one person or group of persons to decide. This question has been answered by giving to these children what are known as standard tests.

35. What are **standard tests?**

A standard test is a specific list of questions or problems which may be given to any group of children anywhere by any intelligent person. The answers which the children give are then graded according to a definite standard and the ability of each child is determined by reference to this standard. His ability can then be compared with the ability of any other child in the same subject by giving the second child the same test and judging the second child's ability by the same standard measure. By the use of this method the ability, for example, of Lawrence fifth grade children in arithmetic can be compared with the ability of fifth grade children in arithmetic in any school where the same test is given. Such standard tests have been used in finding out what Lawrence school children are able to do in certain school subjects.

36. What is the ability of Lawrence High School pupils in first year algebra work?

KANSAS FIRST YEAR ALGEBRA TESTS.

Speed and Accuracy.

Tests	I		II		III		IV		V		VI	
	Speed	Accuracy	Speed	Accuracy	Speed	Accuracy	Speed	Accuracy	Speed	Accuracy	Speed	Accuracy
Standard.	13	89	5.4	37	9.5	65	9.3	75	10.4	67	7.1	34
Lawrence.	11	95	4	65	6	100	9	100	7	76	6	39
Number of Children Tested	71		99		79		100		79		59	

37. What do these results show?

It is probably true that the scores quoted here as standard are too low. Comparing Lawrence scores with the standard ones as they know are, we discover that the Lawrence children are above the standard in accuracy, but below in speed in every one of the six tests. So far as the tests are reliable, this indicates that in teaching algebra we are sacrificing speed in the results actually achieved by children.

38. What is the ability of Lawrence High School children in silent reading?

KANSAS SILENT READING TEST.

Tests	Ninth	Tenth	Eleventh	Twelfth
Standard	22.9	25.6	26.5	29.7
Lawrence	20.4	26.2	27.9	30.5
Kansas Total	24.3	25.2	26.5	28.4
Number of Children Tested in Lawrence	137	141	136	39

The Kansas Silent Reading Tests were given to children in the ninth, tenth, eleventh, and twelfth grades. The result of these tests are shown in the table. This table shows also the standard score, or that score which any large group of children should gain in this test in each one of these grades, and the scores made by all the children in Kansas taking these tests. The results indicate that Lawrence children are below the standard in the ninth year, but are slightly above in each of the following years.

39. What is the ability of eighth grade children in visual vocabulary?

The Thorndike Reading Scale was given to seventy-four children, who made a median score of 9.25. 1,313 eighth grade children in eighteen cities in Indiana made a median score of 7.91. Since the score is on the basis of errors made, Lawrence eight grades are considerably below Indiana eighth graders.

40. How well do Lawrence children spell?

This is answered in terms of their ability as shown in writing the Kansas Timed Sentence Spelling Tests. These spelling tests are based on words selected from the Ayres' Standard Spelling list. The following table shows the results of this test:

Grades	3	4	5	6	7	8
Lawrence Medians	23	38	28	36	36	43
Kansas Medians	28	39	33	40	35	42

The typical spelling ability of the several grades as measured by the medians of these grades is close to the ability shown in the medians for other Kansas children in similar grades. Lawrence children are somewhat below in the third grade, about the same in the fourth, somewhat below in the fifth and sixth, and slightly above in the seventh and eighth.

In all fairness to the situation, it should be stated that the scores here given as standard (Kansas median) are not, at this writing, complete.

41. What ability have Lawrence school children in writing?

The Ayres Writing Tests were given. The first test was given the first week in February. The results obtained are shown below:

WRITING.

Summary of Abilities in Quality and Speed, February, 1917.

School Grade		IV	V	VI	VII	VIII
Standard	Quality	50	55	59	64	70
	Speed	56	65	72	80	90
Lawrence	Quality	48	48	52	76	55
	Speed	62	61	81	....	66
Number of Children Included		64	41	138	183	152

42. What progress did children make in writing?

Several teachers voluntarily gave a second test at the end of the year in order to find out whether their children had improved in writing during the semester. Records of the first and second tests for the same groups of children are shown below.

MEASUREMENT OF PROGRESS FROM FIRST OF FEBRUARY TO LAST OF MAY.

Quality Only.

School Grade	IV		V		VII		VIII	
Tests	1st	2d	1st	2d	1st	2d	1st	2d
Quality Score	43	49	43	50	65	76	55	66
Standard Score	50		55		64		70	
Number of Children Included	43		53	55	168		153	152
Number of Buildings Included	2		1		1 (All)		1 (All)	

The first test indicated that the fourth and sixth grade children tested were above the standard in speed, but that only the seventh grade was above in quality—all other grades being below. The second test covered quality only, and showed an improvement in every group, even in the seventh grade, where in February the class score was about the standard quality.

The teacher of writing in the seventh grade took the pains to make an analytical, comparative study of the individual scores of the pupils in this grade. In the second test in this grade,

133 pupils improved their first scores.
34 pupils received the same scores.
1 pupil received a lower score.

I. Of the 133 improving:
  88 pupils improved 10 points on the scale.
  40 pupils improved 20 points on the scale.
  4 pupils improved 30 points on the scale.
  1 pupil improved 40 points on the scale.

1. Of the 88 pupils who improved 10 points:
  1 pupil's first score was 20 on the scale.
  1 pupil's first score was 30 on the scale.
  4 pupils' first score was 40 on the scale.
  4 pupils' first scole was 50 on the scale.
  24 pupils' first score was 60 on the scale.
  19 pupils' first score was 70 on the scale.
  30 pupils' first score was 80 on the scale.
  5 pupils' first score was 90 on the scale.

2. Of the 40 pupils who improved 20 points:
  5 pupils' first score was 30 on the scale.
  7 pupils' first score was 40 on the scale.
  14 pupils' first score was 50 on the scale.
  8 pupils' first score was 60 on the scale.
  5 pupils' first score was 70 on the scale.
  1 pupil's first score was 80 on the scale.

3. Of the 4 pupils who improved 30 points:
   2 pupils' first score was 30 on the scale.
   1 pupil's first score was 40 on the scale.
   1 pupil's first score was 50 on the scale.

4. The pupil who improved 40 points had a score of 30 on the scale.

II. Of the 34 pupils whose scores were repeated in the second list:

3 pupils had a score of 50 on the scale.
8 pupils had a score of 60 on the scale.
6 pupils had a score of 70 on the scale.
11 pupils had a score of 80 on the scale.
6 pupils had a score of 90 on the scale.

III. The single pupil whose second score was below his first dropped from 70 to 50 on the scale.

43. What may we conclude concerning writing?

The number of children involved in this study is not large enough to warrant general conclusions. In spite of this fact, the study itself is significant. It is a reasonably safe conclusion to say that for 35 of 188 children in this grade, the time spent in practicing writing during this semester was wasted. Thirty-four made no improvement in quality and one was rated poorer at the end of the semester. The absence of the speed scores for this group of children does not permit a full statement concerning their ability in writing.

44. What ability have Lawrence children in arithmetic?

STANDING IN COURTIS RESEARCH TESTS IN ARITHMETIC.

January 10, 1917.

FOURTH GRADE.

	Addition Time 8 M.		Sub-traction Time 4 M.		Multi-plication Time 6 M.		Division Time 8 M.		No. of Child-ren
	Speed	Acc	Speed	Acc	Speed	Acc	Speed	Acc	
Kansas Median—									
A and B	5.8	51%	6.4	64%	5.2	58%	3.8	56%	10,000
Cordley—									
A and B	4.6	33%	5.6	42%	3.7	28%	3.0	28%	22
McAllaster—									
A and B	4.12	34%	5.71	57%	3.6	30%	3.11	30%	30
Woodlawn—									
A and B	4.5	26%	6.42	36%	5.28	27%	3.61	26%	35
Lincoln—									
A and B	3.83	29%	3.4	44%	4.80	35%	4.0	29%	13
New York—									
B	4.25	33%	6.0	40%	3.00	30%	1.71	30%	15
A	5.5	31%	7	36%	4	36%	3.5	28%	9
Pinckney—									
B	4.48	42%	6.42	50%	5.56	45%	4.2	37%	23
A	4.5	47%	4.15	50%	6.6	36%	2.5	32%	22
Quincy—									
B	5.25	31%	6.14	33%	4.85	38%	3.12	28%	20
A	4.6	35%	6.33	41%	5	56%	2.66	36%	10
Average	5.01	34%	5.88	44%	4.88	34%	3.19	30%	199

FIFTH GRADE.

	Addition Time 8 M.		Sub-traction Time 4 M.		Multi-plication Time 6 M.		Division Time 8 M.		No. of Child-ren
	Speed	Acc	Speed	Acc	Speed	Acc	Speed	Acc	
Kansas Median—									
A and B.........	6.0	52%	6.7	63%	5.8	57%	4.0	53%	10,000
Cordley—									
A and B.........	4.77	39%	6.28	41%	4.25	33%	3.2	35%	27
Woodlawn									
A and B.........	4.66	36%	7.6	70%	5.00	58%	3.83	50%	25
Lincoln—									
A and B.........	4.00	33%	4.66	42%	4.33	33%	3.00	30%	12
New York—									
B...............	5.66	32%	7.25	50%	7.00	55%	4.14	43%	24
A...............	6.00	38%	8.5	70%	6.00	38%	4.00	38%	13
Pinckney—									
A and B.........	4.8	42%	6.84	68%	5.73	60%	3.57	49%	45
Quincy—									
B...............	6.00	29%	7.10	66%	5.83	56%	3.66	28%	36
A...............	6.28	43%	7.71	51%	5.14	51%	3.4	29%	33
Average...........	6.26	37%	7.06	62%	5.46	59%	3.13	42%	215

SIXTH GRADE.

	Addition Time 8 M.		Sub-traction Time 4 M.		Multi-plication Time 6 M.		Division Time 8 M.		No. of Child-ren
	Speed	Acc	Speed	Acc	Speed	Acc	Speed	Acc	
Kansas Median—									
A and B.........	8.1	65%	9.1	81%	8.1	77%	6.5	84%	10,000
Woodlawn									
A and B.........	7.25	65%	10.16	75%	6.5	55%	4.66	39%	15
Lincoln—									
A and B.........	4.00	50%	7.00	55%	5.33	55%	4.66	35%	13
Pinckney—									
A and B.........	6.4	44%	9.62	60%	7.66	60%	4.33	65%	32
Quincy—									
A and B.........	5.85	56%	6.83	60%	5.83	65%	4.00	70%	33
New York—									
B...............	6.00	38%	8.50	70%	6.00	38%	4.00	38%	13
A...............	8.00	53%	10.33	80%	6.66	57%	4.5	44%	15
Central—									
B...............	6.15	57%	6.83	74%	5.28	70%	3.5	64%	26
A...............	6.00	41%	8.11	67%	6.00	60%	4.33	41%	36
Average...........	6.13	50%	8.26	66%	6.15	59%	4.19	54%	183

SEVENTH GRADE.

	Addition Time 8 M.		Subtraction Time 4 M.		Multiplication Time 6 M.		Division Time 8 M.		No. of Children
	Speed	Acc	Speed	Acc	Speed	Acc	Speed	Acc	
Kansas Median—									
A and B Classes	8.7	67%	10.0	83%	9.0	78%	9.3	87%	10,000
Central B—									
1st Division. . . .	6.8	44%	8.85	70%	7.00	64%	5.42	68%	37
2d Division.	7.85	43%	8.37	70%	8.22	61%	5.83	70%	37
3rd Division. . . .	6.83	58%	9.16	77%	7.85	63%	5.20	86%	29
4th Division. . . .	6.2	44%	8.66	74%	7.57	68%	3.9	77%	27
Central A.	8.00	47%	10.25	60%	8.12	60%	7.2	73%	32
Quincy A.	8.00	70%	10.33	80%	7.00	70%	7.33	70%	21
Average.	6.83	50%	9.14	70%	7.66	63%	5.73	74%	183

EIGHTH GRADE.

	Addition Time 8 M.		Subtraction Time 4 M.		Multiplication Time 6 M.		Division Time 8 M.		No. of Children
	Speed	Acc	Speed	Acc	Speed	Acc	Speed	Acc	
Kansas Median—									
A and B Classes	9.8	71%	11.5	86%	10.9	82%	10.1	92%	10,000
Central B.	8.33	43%	9.88	68%	8.22	55%	7.00	65%	38
	6.83	55%	9.5	71%	8.33	50%	7.25	70%	36
Central A.	7.22	40%	10.00	70%	8.66	62%	7.00	64%	32
	7.00	47%	10.00	62%	7.8	62%	7.00	60%	31
Average.	7.33	47%	9.83	68%	8.25	51%	7.06	66%	137

45. What conclusions may be drawn concerning arithmetic?

The Kansas Median is that score which was poorer than the score made by 5,000 of the 10,000 children. A comparison of the scores made by the Lawrence children with this median score shows that our schools need more drill work in both speed and accuracy in the fundamentals in arithmetic.

SUPERVISION OF INSTRUCTION.

46. What provision was made for supervision?

Conditions in this particular need very careful consideration. It has already been pointed out that the proportion of school money given to supervision is too small. Outside of the High School, each principal had sole charge of a room. This left each only such time for supervision by visitation as he or she was able to secure by having a substitute or by leaving pupils alone during some study periods. Five of the eight grade principals had full teaching schedules, so that the second plan was possible for only three principals.

47. What was done to improve the situation?

First: The grade principals were told that each one might have a substitute one day every two weeks, that day to be used by the principal in supervision by visiting teachers.

Second: The teaching of drawing, writing, and music was made a regular part of the work of the several grade teachers. The special teachers of these subjects became supervisors of the teaching of their respective subjects instead of being merely special teachers.

Third: Regular teachers' meetings were held throughout the year. There was one general meeting for all teachers once each month. The special supervisors mentioned above met the teachers by grades each month. Each principal held a building meeting weekly. There were several special meetings to discuss teaching problems.

Fourth: Committees of teachers were appointed and are at work upon courses of study for the several subjects taught in the grades.

Fifth: The Board authorized the purchase of a few books for the use of the teachers in each building. These books were made the basis for suggestions regarding the teachers' work after visits made by principals and the superintendent.

Sixth: There was a definite attempt to make the supervisory visits of the principals and the superintendent result in tangible assistance that could be recorded and made the basis of reference.

48. What was the plan for supervisory visitation?

Early in the year it became evident that supervision should be made more specific and more definitely objective. After conference and discussion between the superintendent and the principals, a plan was adopted for trial. The following items were printed on a slip 4x6 inches. The slip was used in triplicate by the principals and the superintendent in their visitation whenever a visit was written up, one slip going to the teacher visited, one to the principal, and one to the superintendent.

VISITATION MEMORANDA

Teacher.................................... Date....................
Class.................................... School....................

General
  Ventilation ....
  Lighting ....
  Appearance ....
  Control ....
  Routine ....

Instruction
  Aim and Plan....................................
  Development ....
  Questioning ....
  Reciting ....
  Assignment ....
  Attitude ....
  Enthusiasm ....
  Voice ....

Results
  Learning ....
  Individual Attention ....
  Study Class ....
  Pupils ....
  Economy ....

Remarks
....

49. What actual use was made of this plan of supervision?

This plan was put into operation about December 1, 1916. The slips turned in to the superintendent's office by the end of the school year show that

12 teachers received 0 slips each.
21 teachers received 1 slip each.
24 teachers received 2 slips each.
8 teachers received 3 slips each.

7 teachers received 4 slips each.
8 teachers received 5 slips each.
4 teachers received 6 slips each.
2 teachers received 7 slips each.

The number of slips returned by each principal together with the number of teachers in the building is given below. The numerator is the number of slips returned and the denominator the number of teachers regularly employed in the building:

Central	14/10	New York	41/7
Cordley	16/4	Pinckney	8/7
High School	13/30	Quincy	8/6
Lincoln	6/3	Woodlawn	28/5
McAllaster	10/4		

This reads: "In Central School fourteen slips were returned for ten teachers," etc.

50. What do these facts show?

The above data should be considered in the light of two additional facts:

1. Every slip does not mean a separate visit; two slips may be given for two recitations observed during one visit.

2. Every visit made was not recorded by a slip.
   The above facts show:

   First: How supervisory visits as reported were distributed among all teachers.

   Second: The average number of supervisory visits reported per teacher for each building.

51. Was anything else done to improve supervision?

Improvement involving factors of human service must come eventually from within the individual; it cannot be put on from without as a class by some secondary agent.

Ranking, paying, and promoting teachers on the basis of their teaching ability is essentially a means of supervision. If successfully administered it is perhaps one of the best means, for it stimulates the individual to self-improvement. When a teacher knows the factors on which she is judged as to her success, when she makes enough self-analysis to judge her own ability or merit in each of these factors, and when she from time to time receives the written as well as the oral judgment of her supervisors as to her visit in the several factors making that composite called **teaching ability**, the chances are that if she has any real worth at all as a teacher she will try to improve herself in those factors where the ranking or merit scheme indicates that she is deficient.

During the second semester every teacher and principal was rated as to teaching ability. Two methods of rating were used. The first was the one published in Educational Administration and Supervision for May, 1914.

This card was placed in the hands of every teacher and enough given to each principal and supervisor of special work so that there would be one for every teacher supervised. Each teacher was then requested to rate herself, and each principal and supervisor to rate the teachers under her.

The second method of rating used was that known as the Boyce Score. Its derivation and meaning are discussed in detail in Part II of the Fourteenth Yearbook of the National Society for the Study of Education. The use of the Boyce score was made optional. But every teacher and every principal, with the exception of a few teachers, used it the same as they used the first card.

THE TEACHING STAFF.

It is a pleasure to say that it is rarely the privilege of a city superintendent to work with a group of principals and teachers so eager to improve, so earnest in their work, and so ready to co-operate in whatever is suggested for the betterment of themselves or of their work.

52. What is the educational preparation of Lawrence teachers?

Education.	Elementary Teachers	H. S. Teachers	All Teachers
Elementary, high and normal....	1	0	1
Elementary, high and college....	6	24	30
Elementary and high...........	2	0	2
Elementary, high, normal and part college................	4	0	4
Elementary, high and part col...	10	4	14
Elementary, high and part nor..	5	1	6
Elementary, high, part college and part normal............	13	1	14
Elementary, part high and part normal....................	1	0	1
Elementary, normal and part college.....................	1	0	1
Elementary, part normal and part college................	2	0	2
Elementary, part high, part normal and part college.........	2	0	2
Elementary, part high and part college.....................	2	0	2
Unclassified....................	1	0	1
Totals.....................	50	30	80

NOTE: All the teachers have more than elementary education and all but two have more than a high school preparation; six of the elementary teachers are college graduates. Eighty per cent of the high school teachers are college graduates, two of the high school teachers have divided their preparation between college and normal school, while fifty-eight per cent of the elementary teachers have had some normal school training. Forty-three per cent of the elementary and high school teachers reported that they had been enrolled in summer courses for the purpose of special study.

53. What has been the length of the teaching experience of Lawrence teachers?

Years of Experience	Elementary Teachers	High School Teachers	All Teachers
0	1	3	4
1	2	1	3
2	5	2	7
3	3	5	8
4	2	1	3
5	5	1	6
6	2	0	2
7	4	1	5
8	2	4	6
9	3	2	5
10	3	0	3
11	1	1	2
12	3	0	3
13	1	0	1
14	2	0	2
15	0	1	1
16	0	0	0
17	3	2	5
18	0	2	2
19	0	0	0
20	0	2	2
21	2	0	2
22	1	1	2
23	0	0	0
24	0	0	0
25	0	0	0
26	2	0	2
28	1	0	1
30	1	0	1
36	1	0	1
40	0	1	1
Totals	50	30	80

54. Where have Lawrence teachers had their experience?

TEACHING EXPERIENCE.

Of High School Teachers.					Of Elementary Teachers.					
No. of Teachers.	Years in El. School.	Years in H. S.	Total Lawrence.	Total Experience.	No. of Teachers.	Years in Lawrence.	Total Experience.	No. of Teachers.	Years in Lawrence.	Total Years.
1	1	11	12	14	1	3	5	1	2	4
1	0	0	0	2	1	6	8	1	0	0
1	0	9	9	18	1	0	7	1	27	31
1	0	3	3	9	1	5	5	1	2	5
1	0	22	22	22	1	5	11	1	1	8
1	0	1	1	3	1	3	3	1	8	12
1	0	8	8	8	1	0	11	1	2	2
1	0	5	5	5	1	7	12	1	2	2
1	0	0	0	1	1	0	3	1	11	26
1	0	0	0	0	1	0	5	1	8	14
1	2	3	5	8	1	3½	7½	1	3	5
1	0	0	0	3	1	10	21	1	3	6
1	0	0	0	7	1	2	2	1	2	2
1	0	6	6	15	1	16	36	1	10	17
1	0	7	7	8	1	2	2	1	7	11
1	0	1	1	5	1	3	12	1	13	19
1	0	0	0	0	1	21	21⅓	1	4	7
1	0	17	17	19	1	0	1	1	2	2
1	0	7	7	12	1	2	9	1	7	14
1	0	1	1	1	1	12	12	1	7	9
1	2	3	5	8	1	15	40	1	7	8
1	0	9	9	9	1	5	7	1	15	22
1	0	2	2	3	1	21	21	1	4	6
1	2	32	34	40	1	9	9	1	26	26
1	0	0	0	0	1	8	15	1	1	10
1	0	0	0	2				1	4	10
1	0	3	3	3						
1	0	18	18	20						
1	0	3	3	3						

The above table shows that twenty elementary teachers have taught less than five years in the elementary schools; twelve have taught ten or more years, while four have taught more than twenty years in the elementary schools; fourteen have taught five years or less; twenty-three ten years or more; eight more than twenty years; one thirty-six years; one forty years. Only six had no experience in the Lawrence schools previous to last year and but one had no experience anywhere previous to that time.

In the high school four have had previous experience in the elementary schools. One of these four has continued in the high school for eleven years and one for twenty-two years; ten have taught less than five years in the high school, and only five have taught more than five years. Just one individual has had forty years' teaching experience, the same condition which prevails in the elementary schools.

55. Where did the Lawrence High School teachers receive their high school training?

Number not Reporting.	Lawrence High School.	Other High Schools.	Total.	Number not Reporting.	Lawrence High School.	Other High Schools.	Total.
	Elementary				High School		
6	24	20	50	2	13	15	30

The above table shows that practically forty-eight per cent of the elementary and nearly forty-three per cent of the high school teachers are graduates of the Lawrence High School.

56. What was the amount of teaching time missed by Lawrence teachers last year?

	Total days
34 teachers missed 0 days	0
5 teachers missed ½ day each	2.5
14 teachers missed 1 day each	14
2 teachers missed 2 days each	4
6 teachers missed 3 days each	18
1 teacher missed 3½ days	3.5
3 teachers missed 4 days each	12
1 teacher missed 4½ days	4.5
5 teachers missed 5 days each	25
1 teacher missed 6 days	6
4 teachers missed 6½ days each	26
1 teacher missed 7 days	7
1 teacher missed 8½ days	8.5
1 teacher missed 9½ days	9.5
1 teacher missed 10 days	10
1 teacher missed 11 days	11
1 teacher missed 14 days	14
1 teacher missed 40 days	40
85 teachers missed	215 days
Average per teacher	2.5 days

57. What is a summary of the data concerning Lawrence teachers?

There were sixty-one elementary school teachers employed last year, including eight principals who gave practically all their time to teaching. There were thirty high school teachers, not including the principal, who did no teaching; five of these were on part time basis. Of the ninety-one teachers employed, forty-three employed in the grades and twenty-nine in the high school were holders of state certificates. Ten teachers in the grades and six in the high school had no experience before they began teaching in Lawrence. Forty-eight per cent of the grade teachers and forty-three per cent of the high school teachers are graduates of the Lawrence High School. Two elementary school teachers have not completed a high school course, though six are college graduates. While fifty-eight per cent have had some normal school training, only twenty-one per cent have completed at least two years beyond a high school training. Eighty per cent of the high school teachers are college graduates. Ten teachers have taught more than ten years in Lawrence and four more than twenty. Nine have had a total teaching experience of twenty years or more each, and four of over thirty years each. The average amount of time per teacher for which substitutes were employed last year was two and one-half days.

58. What steps have been taken to improve the teaching staff?

First: On October 2, 1916, the following provisions were passed by the Board of Education:

> 1. "No person shall be eligible to teach in the elementary schools of Lawrence who shall not have first completed satisfactorily the two years' advanced course of the State Normal School at Emporia or its equivalent.
>
> 2. "No person shall be eligible to a full time teaching position in the high school except one who, in addition to meeting the requirements for a three-year state certificate renewable for life, shall have had at least one year of successful teaching experience in an accredited high school, or its equivalent.
>
> 3. "The Board in an emergency may temporarily elect individuals not possessing the above stipulated requirements, but shall not make such an election unless they declare a genuine emergency to exist.
>
> 4. "None of the above requirements shall apply to any teacher holding a contract with the Board of Education at the time when these requirements are passed."

Second: A plan has been adopted whereby the salary of teachers is determined upon the basis of teaching merit.

Third: Definite salary schedules have been adopted for elementary and for high school teachers.

The last two items are discussed elsewhere in this report under the heads of "Supervision" and "Salaries and Salary Schedules."

SALARIES AND SALARY SCHEDULES.

59. What wages do Lawrence teachers receive?

Below is a tabulation of the monthly wages paid bookkeepers, stenographers, traveling salesmen, male clerks, female clerks, telegraph operators and delivery help in forty-three business firms reporting last fall in answer to a letter of inquiry directed to Lawrence business men. The total number of individuals reported upon by these firms is 210.

One-half of the bookkeepers receive more than $78.50 a month; similarly, stenographers receive $52.00; traveling salesmen, $132.00; male clerks, $62.00; female clerks, $45.00; telegraph operators, $73.70, and delivery help, $47.00. One-half of these 210 employees receive more than $60.00 per month. The above monthly wages are equal to the following annual salaries computing twelve months to the year:

Bookkeepers	$ 942.00
Stenographers	624.00
Traveling salesmen	1,584.00
Male clerks	744.00
Female clerks	540.00
Operators	884.00
Delivery help	564.00
For the employees in all the groups	720.00

The minimum annual salary paid grade teachers in Lawrence is $450.00. This is $90.00 less than the average annual wage of female clerks and $114.00 less than the average salary of those who deliver our groceries and dry goods. The maximum salary for grade teachers is $675.00. This is only $51.00 more than what the average stenographer in our city receives. It is only $135.00 more than what the average female clerk receives. In fact, seven female clerks of our city and eight stenographers are receiving more than our best paid grade teachers.

The minimum high school salary, $675.00, is the same amount as the maximum grade salary. All the statements made in the comparisons immediately preceding hold true in this instance. The comparisons are more acute here, however, because it is commonly recognized that the high school teacher's preparation should be more advanced than that of the grade teacher.

The maximum high school salary paid in our high school, $1,000.00, is $56.00 more than what the average bookkeeper in our city receives, though seventeen bookkeepers and at least ten male clerks in Lawrence receive a higher wage than the best paid high school instructor.

In considering the maximum salary of high school teachers, the salaries paid heads of departments have not been included either within our own city or elsewhere.

The next table will perhaps make the comparisons of wages clearer.

WAGES IN LAWRENCE.

	Minimum	Maximum	Median
Grade	$450	$ 675	$ 619
High school	675	1,000	Male 976 Female 818
Bookkeepers	....	....	942
Stenographers	....	....	624
Traveling men	....	....	1,584
Male clerks	....	....	744
Female clerks	....	....	540
Telegraph operators	....	....	884
Delivery men	....	....	564
Average for all except teachers	....	....	720

60. What do Lawrence teachers spend?

Early in the school year just closed a letter of inquiry was sent to every teacher employed in the city schools. There were seventy-three answers returned to this inquiry. Without identifying individual replies, it was possible to divide the answers and determine those received from:

1. Special teachers.
2. High school teachers.
3. Elementary teachers.

	1		2	3	4		5		6		7		8	
GROUP.	Yes	No			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Special	8	2	..	..	3	6	4	2	6	4	4	4	9	1
High	14	7	...	..	2	10	12	8	10	11	5	12	13	5
Grades	22	19	..	..	5	27	29	7	18	23	19	21	22	17
Fig. rep. total	44	28	$24	$207	10	43	45	17	34	38	28	37	44	23

The above table is a compilation of the answers received. The figures on the top line of the table correspond to the questions in the inquiry. These questions were:

1. Do you live at home during the school year?
2. What do you pay per month for your board? Room?
3. How much, after a careful estimate, do you think that you spend for clothes every twelve months?
4. Do you do your own laundry work?
5. Do you do part of your own laundry work?
6. Do you help support anyone besides yourself?
7. Do you find it necessary to earn money during vacation in order to make ends meet every year?
8. Is your teaching salary large enough to pay your own personal expenses for twelve months?

The answers show:

First: That over 60 per cent of the teachers live at home.

Second: That the cost of board and room is on the average $24 per month. Data preceding in the answers and not included in the above table show that board costs $18 and room $7.50 per month.

Third: That the average teacher spends $207 each year for wearing apparel.

Fourth: That one-fifth of the teachers do all their own laundry work and that over 70 per cent do at least part of their laundry work.

Fifth: That nearly half the teachers help in the support of someone else.

Sixth: That over 43 per cent find it necessary to earn additional money during vacation "to make ends meet."

Seventh: That over 34 per cent do not find their salary enough to cover their personal expenses for twelve months.

Board and room at $24 per month amounts to $216 for the school year. If we add to this sum $207, the cost of wearing apparel, we find that board, room and clothes costs the average teacher $423 for the school year. The minimum salary received is $450. It is evident that the teacher receiving this wage must look elsewhere for part of her support, or else she must cut down her bare living expenses considerably below the average.

The maximum salary is $1,000. The teacher receiving the highest salary has $577 left on which to live three months when no salary is received, to pay church and charitable contributions, and doctor bills, attend teachers' conventions, subscribe for general and professional literature, attend summer school, do a little traveling, assist in the support of someone else and lay by some money for the time of retirement, provided that he or she pays no more than the average for board and room and spends no more than the average for wearing apparel. Is it any wonder that 60 per cent of our teachers are living at home while they work; that 20 per cent do all their laundry work, and 70 per cent do at least part of it? Why should we be surprised to find that nearly half the teachers must seek other lucrative work part of the year in order "to make ends meet," or even that a third find their salary too small to cover personal expenses for twelve months? It is difficult to explain how half the teachers help in the support of someone else.

61. What wages do teachers in other cities receive?

On October 12, 1916, a letter was sent to all the first and second class cities of Kansas and to 150 representative cities outside the state. Replies received were distributed as follows:

California	7	Iowa	13
Colorado	4	Michigan	12
Illinois	10	Minnesota	12
Indiana	15	Missouri	9
Kansas	27		

62. What are the minimum salaries of grade teachers?

MINIMUM SALARIES.

Salary	Number of Cities Outside	 Kansas	 Total
From $325 to $349	1	..	1
From 350 to 374	2	..	2
From 400 to 424	4	1	5
From 425 to 449	1	2	3
From 450 to 474	11	13	24
From 475 to 499	13	5	18
From 500 to 524	11	1	12
From 525 to 549	7	2	9
From 550 to 574	1	..	1
From 575 to 599	4	2	6
From 600 to 624	11	..	11
From 625 to 649	5	..	5
From 650 to 674	1	..	1
From 675 to 699	1	1	2
From 700 to 724	4	..	4
From 725 to 749	0	..	0
From 750 to 774	5	..	5
From 775 to 799	1	..	1
From 800 to 824	1	..	1
From 825 to 849	2	..	2
	86	27	113
Median	$525	$450	$490

The above shows the minimum salary paid teachers in elementary schools in eighty-six cities outside of Kansas and in twenty-seven cities in Kansas. The median of such salary in the eighty-six cities is $525; in the twenty-seven Kansas cities it is $450. The minimum salary paid grade teachers in Lawrence is $450. This is the same as the median for the Kansas cities, though eleven of the twenty-seven cities in the state pay a higher minimum than Lawrence pays. Lawrence pays $40 less than the median city outside of Kansas.

63. What are the maximum salaries of grade teachers

Salary	Number of Cities Outside	 Kansas	 Total
From $ 575 to $ 599	5	3	8
From 600 to 624	4	2	6
From 625 to 649	6	6	12
From 650 to 674	3	0	3
From 675 to 699	12	4	16
From 700 to 724	11	2	13
From 725 to 749	1	0	1
From 750 to 774	5	3	8
From 775 to 799	1	0	1
From 800 to 824	5	2	7
From 825 to 849	..	1	1
From 850 to 874	5	1	6
From 895 to 899	3	..	3
From 900 to 924	8	..	8
From 925 to 949	..	..	..
From 950 to 974	2	..	2

From 975 to 999	..	..	..
From 1,000 to 1,024	8	..	8
From 1,025 to 1,049	..	..	..
From 1,050 to 1,074	..	..	..
From 1,075 to 1,099	1	..	1
From 1,100 to 1,124	3	..	3
1,200	2	..	..
	85	27	112
Median	$750	$687	$720

The above shows the maximum salary paid to grade teachers in eighty-five cities outside of Kansas and in twenty-seven cities in Kansas. The median maximum salary outside of this city is $750. The corresponding salary in Kansas is $687; the maximum for Lawrence is $675, twelve dollars less than the median maximum for Kansas and $75 less than the median outside of Kansas. Fifty-four of the eighty-five cities outside the state pay a higher maximum than Lawrence pays.

Summary of Grade Teachers' Salaries: The entrance (minimum) salary paid elementary school teachers by our city is too low. If we were to set up a salary schedule with our present lowest salary as the minimum or entrance wage for the teacher who just meets our requirements, we would be obliged to compete with eleven other cities of Kansas who would pay the same teacher from $25 to $225 more for her services the first year of her teaching. It is self-evident that under such conditions Lawrence could never secure the best beginning teachers. But perhaps we could purchase the services of the same teacher later. Perhaps we could let someone else take the beginning and we hire her after she is somewhat experienced. Let us see if we could. If we should make a salary schedule with the maximum for grade teachers, the highest salary that we now pay any of them, excluding the principals, nine cities in Kansas would offer to a successful teacher from $25 to $125 a year more as her highest possible salary. Furthermore, one city in Kansas pays to its beginning teachers the same salary that Lawrence pays to its highest paid teachers.

64. What are the minimum salaries of high school teachers?

	Number of Cities		
Salary	Outside	Kansas	Total
From $ 500 to $549	1	0	1
From 600 to 649	10	4	14
From 650 to 699	13	9	22
From 700 to 749	8	8	16
From 750 to 799	6	2	8
From 800 to 849	15	1	16
From 850 to 899	4	..	4
From 900 to 949	8	..	8
1,000	6	..	6
1,100	2	..	2
1,200	3	..	3
	76	24	100
Median	$800	$700	$750

The above shows the minimum salaries paid high school teachers in seventy-six cities outside of Kansas and in twenty-four cities in Kansas. The median of such salaries outside this state is $800; inside the state it is $700. In Lawrence the minimum is $675, $25 below the Kansas median and $125 below the median outside of Kansas. Eleven of the twenty-four Kansas cities start their high school teachers at a higher salary than Lawrence does.

65. What are the maximum salaries of high school teachers?

Salary	Number of Cities Outside	Kansas	Total
From $ 600 to $ 649	1	..	1
From 650 to 699	0	..	0
From 700 to 749	1	..	1
From 750 to 799	1	2	3
From 800 to 849	8	3	11
From 850 to 899	2	3	5
From 900 to 949	10	7	17
From 950 to 999	0	0	0
From 1,000 to 1,049	1	2	3
From 1,050 to 1,099	5	1	6
From 1,100 to 1,149	6	..	6
From 1,150 to 1,199	1	1	2
From 1,200 to 1,249	4	2	6
From 1,250 to 1,299	0	1	1
From 1,300 to 1,349	2	..	2
From 1,350 to 1,399	1	..	1
From 1,400 to 1,449	7	..	7
From 1,500 to 1,549	7	1	8
From 1,600 to 1,649	4	..	4
From 1,650 to 1,699	1	..	1
1,700	1	..	1
1,750	1	..	1
1,900	2	..	2
2,000	3	..	3
2,300	1	..	1
	71	23	94
Median	$1,150	$925	$1,100

The above shows the maximum salaries paid high school teachers in seventy-one cities outside of Kansas and in twenty-three cities in Kansas. The median of such salaries outside the state is $1,150; within the state it is $925. The maximum in Lawrence is $1,000, $75 above the median for the Kansas cities, but $150 below the median for cities outside of Kansas.

66. What do these facts show about salaries of high school teachers?

The minimum high school salary in Lawrence is lower by $50 or $75 than it should be. The maximum should be raised if possible. It would appear from the data collected from outside of Kansas that high schools in our state do not pay as high salaries to their teachers by $100 on the average as do such schools outside the state. An inevitable result of the recent Kansas law raising standards of requirements for high school teachers will be a rise in the salary of Kansas high school teachers. Lawrence must make ready to meet this situation with some advance in her schedule of salaries for high school teachers. If she does not she will be compelled to man her high school with the teachers that many other high schools of the state will not accept.

In this connection it may be well to point out that the above figures do not include the salaries paid in Lawrence for those assistants in high school who teach only part time and are at the same time pursuing student work in the University. Such assistants may be considered merely as instructors or apprentice teachers whose salaries should be determined, partly at least, by factors which do not operate in determining the salaries and schedule for the regular full time teacher.

A feature noticeable in several schedules for high school teachers is the provision for heads of departments and their assistants. Not enough cities reported on these items to give data sufficient to determine what the form of such salaries should be. It is highly significant, however, that in many of the best high schools in the United States the teaching force is divided into heads of departments, assistants, and teachers.

67. What may we conclude concerning Lawrence salaries?

Grade teachers receive salaries which compare unfavorably with salaries paid in Lawrence to delivery men, female clerks, and stenographers. In both the minimum and maximum salaries paid teachers in this group, Lawrence falls below the typical city outside of Kansas and falls below the typical city in Kansas in the maximum, and is just equal to the typical city in the minimum salary.

The salaries of high school teachers in Lawrence compare favorably with those of stenographers, male clerks, female clerks, telegraph operators, and delivery men. They compare unfavorably with the salaries paid bookkeepers and traveling salesmen. The minimum paid this group of teachers is less than the minimum paid high school teachers in the typical high schools both inside Kansas and outside of Kansas. The maximum is more than the maximum paid by the typical high school in Kansas, though eight of the twenty-three Kansas high schools report their maximum salaries from $50 to $500 a year more than what Lawrence pays.

68. What is the relation of present economic conditions to teachers' salaries?

DECLINE IN THE PURCHASING POWER OF THE DOLLAR.

The dollar that bought $1.00 of necessities in 1896 bought—

$0.95	in 1897
.87	in 1898
.87	in 1899
.81	in 1900
.76	in 1901
.68	in 1902
.74	in 1903
.73	in 1904
.73	in 1905
.70	in 1906
.67	in 1907
.64	in 1908
.59	in 1909
.58	in 1910
.61	in 1911
.56	in 1912
.57	in 1913
.54	in 1914
.53	in 1915
.46	in 1916
.38	in 1917 (Jan. 6)

The rise in prices in the necessities of life during the past few years has been extraordinary. The table given above shows the decline in the purchasing power of the dollar during a period of twenty years.

Bulletin No. 200 of the Department of Labor shows that the wholesale price of commodities, weighted in proportion to their importance, increased over 66 per cent from 1896 to 1915. But about the end of the year 1915 a much more rapid rise in prices began, a trend which still continues. Bradstreet's for November 11, 1916, estimates that prices for commodities in the year just preceding that date had increased 23.3 per cent. For the same period Dunn's estimates the increase at 26.4 per cent. It is plain that during the past year retail prices have increased practically 25 per cent. Recent reports which cannot be verified estimate the increase in prices of commodities in one month after about January 15 as 10 per cent.

Any person living on a fixed salary is at the present time under a great disadvantage. In the commercial world the salaried employees have shared to a certain extent their unprecedented prosperity of the times. Many firms have divided their profits with their employees by granting some form of bonus.

69. Is the Lawrence situation merely a temporary one?

It may be asserted that the present stringency is only temporary and that because of this fact teachers as well as other individuals supporting themselves on salaries should strive to adapt themselves to these conditions by increased personal economies. There is doubtless some truth in such an assertion. On the other hand, we should examine the salaries paid the teachers in Lawrence for a few years past to determine whether the advances in these salaries have kept pace with the general advances in the cost of living.

70. What advance has been granted Lawrence teachers in recent years?

	H. S.	Grades	Special Teachers
Average salary, 1911-12	$723.37	$564.13	$713.29

PER CENT OF INCREASE OVER 1912-13.

	H. S.	Grades	Special Teachers
1913-14	9.5%	6.4%	6.4%
1914-15	8.9%	6.4%	.6% (Lower)
1915-16	12.2%	15.1%	11.0%
1916-17	21.4%	3.9%	16.6%

The above table shows clearly that the increase in the salaries paid teachers in Lawrence has not kept pace the last five years with the increase in the cost of necessities during the same period of time. According to both Bradstreet's and Dunn's the increase in the prices of commodities for the year 1916 alone is greater than the per cent of increase in salaries of any group of teachers in Lawrence for the whole period of the last five years. It should be remembered in addition that the increase in the price of these commodities has been greater since 1916 than during that year. If it were to be admitted that the teachers of Lawrence five years ago were receiving an average salary that was then fairly commensurate with what they should receive, it still remains a fact that the average salary which they now receive is far below what they should be receiving when we consider the increase in the cost of the actual living commodities.

71. Why then should Lawrence teachers have their salaries raised?

I. The salaries paid Lawrence teachers do not compare favorably with the salaries paid other employees requiring less preparation and less skill in representative business occupations in Lawrence.

II. The salaries paid teachers in Lawrence are lower than the salaries paid teachers in similar positions in other leading cities in Kansas.

III. The salaries paid teachers in Lawrence are lower than the salaries paid teachers in similar positions in similar cities outside of Kansas.

IV. The advances in the average salary paid teachers in Lawrence has fallen considerably short in the past five years of keeping pace with the advances in the cost of necessary commodities.

72. What has been done to relieve this situation?

The following schedule was adopted by the Board to apply beginning September, 1917:

I. All teachers shall be rated annually according to the following classification:

A—Excellent.
B—Good.
C—Medium.
D—Poor.
E—Very poor.

Each teacher shall be rated by her principal, by such supervisors as have to do directly with her school work, and by the superintendent. Each teacher is expected also to provide the superintendent with a rating of herself annually according to the same plan by which she is rated by the principal, supervisors and superintendent. Final recommendation shall be made by the superintendent.

II. A teacher receiving a final rating of poor shall receive no increase in salary and shall not be eligible for re-election more than once under such rating. A teacher rated very poor shall not be eligible for re-election.

III. Teachers rated excellent, good or medium shall receive an annual salary advance according to the following schedules:

Grade Schedule.

Group	Beginning Salary	Annual Advance Ex.	Annual Advance Good	Annual Advance Med.	Maximum Salary
Probationary.	$550	$50	$40	$25	$600
Full standing.	600	50	40	25	800 for Medium 900 for Good

1. A beginning teacher having no experience will be classed in the group Probationary for at least two years. To be transferred from the Probationary group to a teacher in full standing, one may receive two excellents; one excellent and one good; one excellent and two mediums, or two goods and one medium.

2. Any teacher who receives a rank of excellent for three consecutive years as a teacher in full standing may, after such time has elapsed and so long as she maintains such rank, receive an annual advance of $75 until she receives $1,000 per year.

High School Schedule.

Group	Beginning Salary	Annual Advance Ex.	Annual Advance Good	Annual Advance Med.	Maximum Salary
Probationary.	$700	$50	$40	$25	$ 750
Full standing.	775	50	40	25	1,000 for Medium 1,200 for Good 1,400 for Ex.

1. A beginning teacher having one year of experience will be classed in the group Probationary for at least two years. To be trans-

ferred from the Probationary group to a teacher in full standing, one must receive similar ranking to that necessary under the grade schedule.

2. Any teacher who receives a rank of excellent for three consecutive years as a teacher in full standing may, after such time has elapsed and so long as she maintains such rank, receive an annual advance of $75 until she receives $1,400 per year.

IV. Recommendations for rating and salary shall be based upon the individual teacher and may take into account one or all of the following factors:

A—Teaching skill.
B—Advancing scholastic or professional training.
C—Travel.

It is distinctly understood that teaching skill is the most important of the three qualities specified, and that either training or travel can be considered a basis for rating only as either may contribute toward teaching skill.

V. The beginning salary of a teacher who has not been previously employed in Lawrence shall be determined on the basis of credentials, and the first rating shall be given after a year of experience in the school system.

VI. It is distinctly understood that the principles above enumerated to govern the administration of the salary schedules may be changed after clear proof that they can be improved upon to insure the best results for the school system.

INDUSTRIAL WORK.

73. What is the regular plan for industrial work in the grades?

Industrial work for the children of the grades is regularly given to the boys and girls of the sixth, seventh and eighth grades, one day a week per grade for the boys at the Central Shop and for the girls at their rooms.

74. What was done during the year just closed?

During the second semester of the past year an experiment has been tried in three buildings. This experiment consisted in giving, for one hour a week, industrial work to the boys and girls in the fifth grade and providing the work in the building where the children happen to be. The results of this experiment is shown in the following brief report.

In the girls' work there were twelve children enrolled in the Cordley School and these made raffia handkerchief bags woven on looms made by the pupils.

In the New York School sixteen girls made small rugs from rags torn and sewed by the pupils.

In the Woodlawn School fourteen girls made dust cloths hemmed by hand, curtains for the school room, cut and hemmed by hand, hemstitched handkerchiefs, small braided rugs, pin cushions for the sewing basket.

In the work for the boys the pupils were taught to use such simple tools as the block plane, back saw, try square, knife and coping saws. The material used was from ¼ to ½ inch thick, surfaced upon the two broad sides, leaving all the narrow edges to be planed. Small models such as flower sticks, match boxes, wren houses and simple toys were made. The pupils were required to do work with a reasonable degree of accuracy and many of the pieces were decorated with carving or stamped designs. The instructor reports that in his judgment it is impractical, even impossible, to use the pupils' desks for this work, but that where some sort of a table or bench can be had there seems to be no doubt of success of the work.

The experiment was a success. It seemed to prove quite clearly that it is not necessary to provide special rooms for industrial art work for either the boys or the girls in order for such work to be taught successfully in the fifth grade. The same conclusion will probably hold for the sixth grade. This type of work for the grades beyond the sixth will be taken care of in the Intermediate School which is in process of organization.

75. What work has the Shop Department done for the schools?

During the past year the Manual Training Department of the High School has made considerable equipment for the schools. The nature of this work and the estimated economic profit which it has been to the schools is indicated in the following list:

	Cost of Material.	Approximate Cost of Article if Purchased.
Table for superintendent's office	$ 1.90	$ 6.00
Raised section for clerk's desk	.95	1.50
Typewriter table for high school	.85	3.00
Bulletin board for High School office	.15	.40
Sixty-four window ventilators @ 25c	16.00	28.00
Magazine rack for office	3.90	8.00
Lockers for gymnasium	15.00	22.00
Twenty drawing tables @ $2.60	52.00	160.00
Bulletin board for Manual Training Building	2.00	5.00
Sand table for Pinckney School	2.00	6.00
Sand table for New York School	2.00	6.00
Sand table for Lincoln School	2.00	6.00
Sand table for Cordley School	1.60	4.00
Lunch table for McAllaster School	3.25	7.00
Lunch table for Cordley School	3.25	7.00
Cabinet for eighth grade room	2.85	5.00
Equipment for fifth grade manual training work	3.90	6.00
Two physiography tables	5.75	10.00
Looms for ungraded rooms	1.00	2.00
Two benches for ungraded rooms	13.50	24.00
Looms for fifth grade Domestic Art	.60	1.25
Teachers' closets for Pinckney School	11.50	20.00
	$145.95	$348.15
		145.95
Estimated saving		$202.20

76. What special work was done because of the American declaration of war?

First: A special voluntary group of High School girls was organized to sew for the Red Cross. There were twelve members of this group and they met twice a week for the last four weeks of school. The garments which they sewed were later used as models for Red Cross sewing in Douglas County rural work.

Second: The place and content of the courses in cookery were considerably changed, and special emphasis was put upon teaching food substitution, food economy, and food conservation. Group work and demonstration were substituted in some projects that are ordinarily done as individual work.

Third: Five lessons in canning fruits, vegetables, and food uses were given during the summer vacation. The instructor was the regular cooking teacher. An average of twenty-eight women attended each of these lessons.

PHYSICAL WELFARE.

77. What provisions are made for the physical welfare of children?

The Rules and Regulations of the Board of Education make the following provisions.

> 1. "Provision for 'A Committee on Health,' consisting of the President of the Board, one other member, and a practicing physician of the city of Lawrence. (Art. IV, Sec. 1, 7). This committee shall inquire into the condition of the health of teachers and pupils and recommend their exclusion from school when deemed necessary for the health of the school. They shall examine all sanitary conditions of buildings and grounds and take steps necessary to remedy defective sanitation. (Art. IV, Sec. 7).
>
> 2. "The sessions of the school may be suspended by order of the Board during the prevalence of general epidemic. (Art V, Sec. 11).
>
> 3. "Teachers are required, for the health of themselves and pupils, to give particular attention to ventilation and warming of their rooms, and on no account to suffer the children to sit in drafts of cold air; and, as a general rule, to cause all windows to be open for the free admission of air at recess, and at no time to raise the temperature of the room higher than 70 degrees Fahrenheit. (Art VI, Sec. 24).
>
> 4. "No pupil shall be received or continued in the public schools known to be infected by a contagious disease, or coming from a family where any such disease prevails; and the Board may require from pupils satisfactory evidence of their having been vaccinated. (Art VII, Sec. 5).
>
> 5. "All pupils who go to school without proper attention having been given to personal cleanliness or matters of dress, shall be sent home to be properly prepared for school or shall be required to properly prepare themselves for the school room before entering." (Art. VII, Sec. 9).
>
> 6. "Every teacher elected must, before her contract is valid, submit a medical certificate which is acceptable to that member of the Health Committee of the Board, who is a physician. The form of this medical certificate has been adopted by the Board." (Minutes of the Board of Education meeting, May 14, 1914).

It will be noticed that these provisions deal largely with exceptional conditions and are precautionary measures.

78. What is the legitimate field of physical welfare work in the public schools?

It should go just as far as the physical condition of the school child is a conditioning factor of successful school work. The indications are that it will consider the physical equipment and development which the school can give a child quite as important and necessary as equipment and development in arithmetic, in history or in the use of the mother tongue. There is some reason to think that the present war will result in an increased demand upon the public schools to stress more, and plan better for, the physical education of school children.

The legitimate scope of the field of physical welfare work in the public schools includes the following aspects:

1. Recreative, to provide amply and intelligently for the play instinct of children.

2. **Corrective**, to bring back to normal the children who are forming or have formed bad habits, postures, or ideals of hygiene and sanitation, which if continued will result in permanent handicap or disability.

3. **Preventive**, to make the spread of contagious diseases, bad habits, and bad ideals difficult.

4. **Curative**, to assist in finding and bringing back to normal physical conditions the individual children who are physically afflicted.

5. **Developmental**, to help the children, the parents, and the community to correct habits of living.

6. **Protective**, to look after hygiene and sanitary conditions of school buildings, to see that the schools set a respectable example.

79. What need is there of such wide activity of the schools in the physical welfare of the children?

First: The physical welfare of the individual is an economic asset both to himself and to the society in which he lives. We pay for other people' being sick and unable to work, as well as for our own ills. Professor Irving Fisher estimates, upon the basis of mortality statistics for ninety different diseases, that the adoption of a well established hygienic principles would add fifteen years to the present average length of human life. These fifteen years that might be lived but are not, mean a tremendous economic loss to society. The minimum average loss to society from each postponable death has been elaborately and carefully figured to be $1700. Of the 1,500,000 deaths in the United States each year, it is the combined opinion of the best medical authorities that 42 percent could be put off. Six hundred thousand such deaths at $1700 each gives the enormous total loss of $1,070,000,000.

A recent editorial in a daily denounces in scathing terms any political action or appointment in America during this war that may mean the loss of men's lives. The denunciation was none too rigorous.

But what shall we say of any community that fails to make provision to save the lives of the children in its own homes? Practical science proves that from one-half to two-thirds of infant deaths are due to the neglect of a few simple hygienic precautions. This, too, is slaughter. It will continue unabated until the new generation is educated to a different hygienic viewpoint. "In the prevention of infant mortality, as well as in conservation of vitality in general, no other agency is capable of contributing as much as the public school."

Second: If the first part of the answer has been general, let the second be more specific. During the second semester of the year, a personal health survey was made of the children in the elementary grades of our city's schools. The blank used was practically the same as that to be found in Hoag and Terman's "Health Work in the Schools." The facts which this survey disclosed are worth considering.

When 1627 Children Get Up.

5:00 o'clock	1.6%
5:30 o'clock	3.7%
6:00 o'clock	14.4%
6:30 o'clock	9.5%
7:00 o'clock	40.0%
7:30 o'clock	21.8%
8:00 o'clock	8.1%
8:30 o'clock	.5%
9:00 o'clock	.1%

When 1569 Children Go to Bed.

6:00 o'clock	.3%
7:00 o'clock	3.9%
7:30 o'clock	3.6%
8:00 o'clock	25.5%
8:30 o'clock	11.0%
9:00 o'clock	32.3%
9:30 o'clock	9.7%
10:00 o'clock	10.2%
10:30 o'clock	.3%
11:00 o'clock	1.6%
11:30 o'clock	.1%
12:00 o'clock	.6%

How Often 1544 Children Bathe.

Daily	2.9%
4 Times a Week	.6%
3 " " "	6.4%
2 " " "	6.2%
1 Time " "	70.4%
2 Times a Month	3.4%

Defects Among 1664 Children.

Nervous	1.7%
Bad Teeth	25.8%
Bad Eyes	2.2%

Among About 1650 Children,

11.4%	Do not eat breakfast regularly
5.4%	" " " noon meal "
37.7%	Drink coffee regularly
41.6%	" tea "
31.9%	Sleep with windows shut
48.7%	Have never been to a dentist
15.3%	Have no toothbrush
16.4%	Eat candy every day

The above results are not entirely accurate. The observations were not made by specialists. The percent of defects discovered is therefore without doubt much smaller than that which actually exists. Medical inspection in scores of cities shows that careful examination would show about the following conditions:

Children under nourished	10 %
" with defective teeth	50 %
" " obstructed breathing	10 %
" " poor eyesight	20 %
" " poor hearing	5 %
" " deformity	5 %
" " heart trouble	2½%
" " nervous disorders	5 %

80. What has been done for the physical welfare of school children during the past year?

About the middle of March the schools faced the possibility of being obliged to close on account of prevailing epidemics. Considering the inadequate means of handling the situation, the Health Committee of the Board recommended the election of a trained nurse to be appointed Supervisor of Hygiene.

81. What did the Supervisor of Hygiene do?

She began work on March 19th. From that date till the close of school on June 1st, her work is shown in the following report:

First: 580 Children examined and readmitted to school.

- 61 Sent home ill.
- 112 Cases reported to the Health Officer.
  - 85 Measles.
  - 9 Scarlet fever.
  - 4 Mumps.
  - 1 Whooping cough.
  - 8 Chicken pox.
  - 2 Typhoid.
  - 3 Diphtheria.

Second: In the interest of school children and school progress of children,

- 9 Homes were visited with the result that three children had their tonsils removed.
- 1 Child was provided with a pair of glasses.
- 1 Child was daily given fresh milk at school, provided by the Social Service League.

The treatment of the last case continued during the last six weeks of school and the child increased in weight from 72 to 75 pounds.

Third: Each school was visited three times for the purpose of inspecting the building in matters of sanitation and hygiene, particularly with respect to toilet facilities.

In this connection it was reported to the County Health Officer that a pig pen adjoins the Woodlawn School and that an outside closet is operated at 1109 Massachusetts Street and is situated less than forty-five feet from the Quincy School building. In the case of the second of these last named items, school authorities have been working during the entire year to try to discover some means of legal procedure by which the children of the Quincy School could be freed from this menace. Up to the date of writing this report no such means has been discovered. The menace still remains.

Fourth: The Supervisor of Hygiene, with some assistance, took the school census.

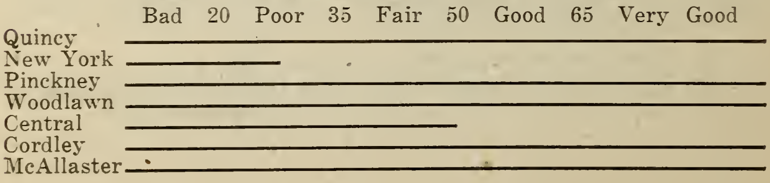
BUILDING CONDITIONS IN THE GRADES.

82. What is the efficiency of our grade buildings for school purposes?

Attention has already been called to the fact that the amount of money spent for repairs is high. The cause for this fact is not far to seek. Many of the buildings are old. They are in constant need of repair. Your Board has been more than justified in giving special attention to this matter during the year covered by this report.

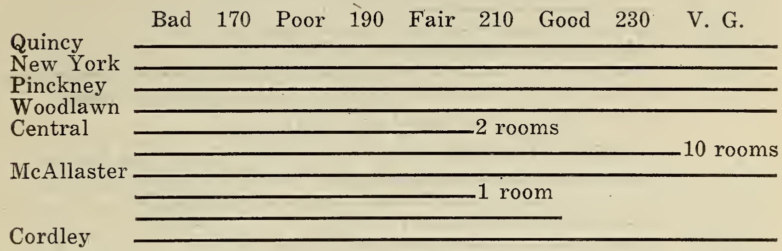
During the past school year a survey has been made of all except one of the grade buildings. Certain conditions were measured objectively according to standards accepted by the best authorities. The results of this survey are given in the diagrams below. The data for the Lincoln School was not available when this report was prepared.

Square Feet of Playground Space Per Child.



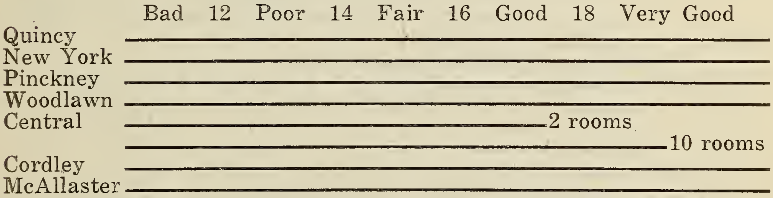
In playground space the school children of Lawrence are exceptionally well provided for except at two buildings, the New York and Central.

Cubic Feet of Air Space Per Child.



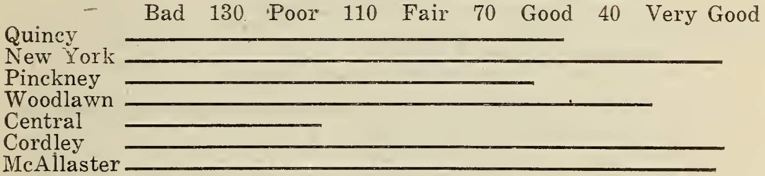
In cubic feet of air space only three rooms rank below very good. One of these three is at Central and two are at McAllaster. This measure takes no account whatever of ventilation devices.

Square Feet of Floor Per Child.



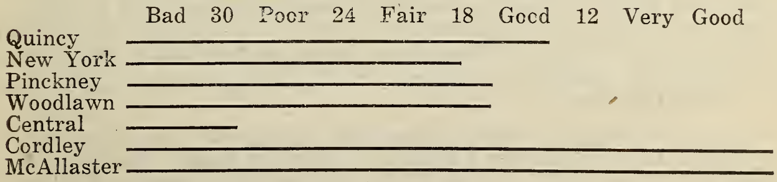
It is very apparent that the floor space is nowhere crowded with school children. There is no room that ranks lower than Good.

Pupils Per Drinking Fountain.



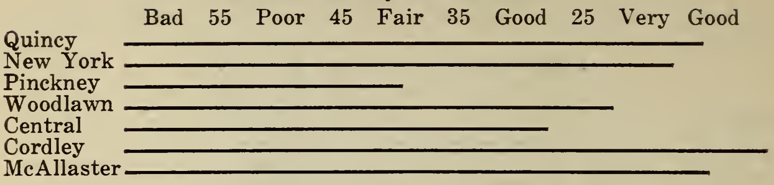
Drinking accommodations are ample in number except at the Central school. This school will be improved in this respect before the opening of the next school year.

Number of Girls Per Toilet Seat.

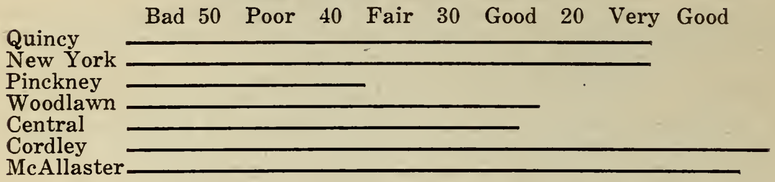


Toilet accommodations for the girls are ample except at the Central building. There conditions should be improved at once.

Number of Boys Per Urinal.

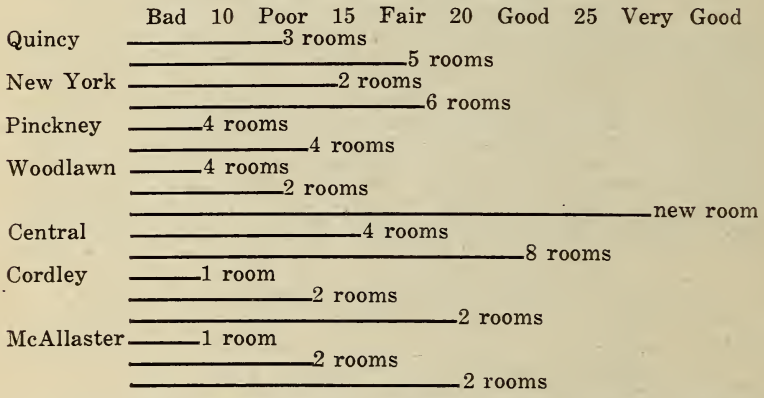


Number of Boys Per Toilet Seat.



Toilet accommodations for the boys do not fall below Fair in any building.

Percent Window Area Is of Floor Area.



It is in lighting area that our buildings make the poorest showing.

In 10 rooms the area is Bad.
In 15 " " " " Poor.
In 20 " " " " Fair.
In 8 " " " " Good.
In only one is it Very Good.

There are two possible methods of improving this condition. One is to cut additional window space. The other is to provide artificial lighting. The first does not seem practical. The Board has already begun the latter. After the additional equipment has been installed, tests should be made to determine just how much further the Board should go to make the lighting of our school rooms what it should be.

There are some very important items not taken into account in the above diagrams.

I. Ventilation is wholly unprovided for except in the three new buildings, the Cordley, the Lincoln, and the McAllaster. In the other buildings, the only real means of ventilation is by opening the windows at the top and bottom. In the three buildings mentioned, the facilities provided are quite inadequate. Recourse to windows must be made there also. This is a very serious situation. Children working in rooms poorly lighted and poorly ventilated cannot do their best and, what is even worse, their health is impaired. It is poor economy for any community to permit such a condition to continue indefinitely. When the community has $375,000 invested in buildings and equipment and pays $100,000 annually to keep an industry running it should see to it that it receives the largest possible return as measured by the output or product of that industry. So long as conditions of lighting and ventilation remain as they are at present, the community, through its children, cheats itself out of hundreds of dollars annually in health and educational progress.

The Board has already found out in the single matter of artificial lighting that the improvement of these building conditions is a difficult matter to finance. It is costly work and not much of it can be done any one year. Installation of ventilating equipment is also expensive. But these are problems that must be faced if the community wishes to make working conditions for the school child what they by all means should be. It would seem therefore that the problem should be thought of as immediate in its pressing need, but only partly immediate in its solution. The Board would do well to go into a very careful, thorough investigation of the needs with respect to lighting and ventilation, and to adopt a repair program on these items, covering an extended period of say, at least five years. Such a plan would have the following advantages:

1. It would necessitate an investigation of the school buildings that would result in an accurate and detailed knowledge of what the schools have and what they need in lighting and ventilation.
2. It would distribute the cost over several years.
3. It would make possible some necessary improvements that will probably never be done if they are left to plans provided for separately, year by year.
4. It would give the community at large the chance to discuss the matter, to inform themselves with regard to it, and to endorse or to veto the plan.

There is, of course, no possible guarantee that such a measure, if adopted by one board, would be carried out by a succeeding board. Any board that inherits such a plan would, however, have placed upon it an obligation that it would be compelled to dispose of in some way.

II. **Fire Hazards:** Last October, the State Fire Marshal, at the request of the Board, inspected all the school buildings. After his visit he recommended, in a written report, certain changes at the Manual, High School, Central, Quincy, New York and Pinckney buildings.

At the time of writing this report all the recommended changes have been made or are now being made, except lowering window exits to fire escapes at the High School, and an additional hand rail on fire escape at New York.

The changes made included a new fire escape at Pinckney; moving the fire escapes at Manual and Central, and cutting proper exit openings onto the same; and the placing of fourteen safety bar locks on exits to fire escapes. These repairs have involved an expenditure of $1335. But no reasonable expenditure looking toward the protection of life from fire can be thought of as other than peremptorily necessary.

HIGH SCHOOL BUILDINGS.

83. What are conditions with respect to the proper housing of the High School?

This question has been the source of much discussion. If possible we ought to approach it unbiased, or at least open minded. The ardor of high school enthusiasts must not be mistaken for sound argument. On the other hand, our eyes should be open to see any faults that actually exist.

It is extremely fortunate that we can use an impersonal standard in helping us to answer the above question. When we want to know the size of a plot of ground we do not go and ask a number of people how large they think it is. We use a yard stick or line and measure it. Similarly we are able actually to measure the present building equipment of our high school. The measuring stick is not quite so simple as the yard stick, but it is just as good in freeing us from the necessity of depending solely upon mere personal opinion.

The measuring device is called "Strayer's Score Card for City School Buildings." It was not made by one man, but represents the standard practice in scores of cities throughout the United States. Below is shown, in summary form, the scores of the Manual and of the High School buildings compared with this standard. These ratings were made by two high school principals, experienced school men but entirely disinterested in the Lawrence high school situation.

	Scores		
	H. S.	Standard	Manual Train'g
I. Site	88	125	88
A. Location	35	55	35
B. Drainage	28	30	28
C. Size and form	25	40	25
II. Building	114	165	140
A. Placement	16	25	17
B. Gross structure	53	60	57
C. Internal structure	45	85	66
III. Service Systems	136	280	146
A. Heating and ventilation	34	70	28
B. Fire protection	29	65	48
C. Cleaning system	11	20	11
D. Artificial light	16	20	18
E. Electric service	4	15	4
F. Water supply	7	30	15
G. Toilet System	35	50	32
H. Mechanical service	0	10	0
IV. Class Rooms	198	290	206
A. Location and connection	20	35	30
B. Construction and finish	67	95	59
C. Illumination	51	85	61
D. Cloak Rooms	23	25	20
E. Equipment	37	50	36
V. Special Rooms	40	140	61
A. Large rooms	19	65	6
B. For school officials	13	35	23
C. Other special	8	40	32
Totals	576	1000	651

We are able therefore by this standard to grade our high school buildings. One receives a mark of 58% and the other one of 65%. If there is any error in these percents it is towards making them too large rather than too small.

It would be possible to go into a detailed description of the building facilities of our high school. To do so seems unnecessary here, however, because the grading of the two high school buildings by this standard score puts us in possession of all the important facts in the situation.

Brief statements covering a few of the outstanding features may be worth while.

1. Both buildings are inadequately lighted.
2. Both buildings are entirely without systems of ventilation.
3. The crowded conditions have given rise to the following:

A. The attic of each building is used for regular school purposes, the Manual attic for a gymnasium, and the other for the Art Department. Neither was built for regular service. The latter is extremely poorly lighted and ventilated and its use necessitates pupils' climbing three flights of stairs to reach toilet or lavatory privileges. The gymnasium is not ventilated at all to speak of. It is so poorly heated as to be unusable the coldest days of the winter. It is very inadequate to serve the purpose for which it is being used.

B. The basement of the older building, although never intended to be used for class rooms, now has three in it. The last has just been made out of a part of the girls' toilet room. The girls' toilet facilities are already inadequate. Lighting and ventilation of these basement rooms is much more difficult than it is in the rooms above the basement with the exception of the attic.

C. The assembly room will seat only one-third of the high school enrollment. One of the most important phases of activity among high school children is practically cut off by reasons of this situation. Debates, declamatory contests, student mass meetings, class exercises, central parent-teachers meetings, and other gatherings that typify the most important training of the high school period are handicapped so badly as to be almost entirely lacking.

D. There is no library room. A well selected library of over 1200 volumes is scattered through the two buildings.

84. Does Lawrence need a new high school building?

The grades of 58% and 65% given to the two buildings now in use unquestionably mean that the housing conditions for the high school are in a grave condition.

But perhaps this is not a fair basis of judgment. Perhaps Lawrence is already doing as well for her high school as other Kansas cities are for theirs. Let us see.

On February 17, 1917, a letter was sent out from the superintendent's office to a number of representative cities in this state inquiring about certain high school conditions in these cities. The following table gives the results of this inquiry:

City	Assd.	Bonded Indebtedness	H. S. Enrolment	Age H. S. Building	Cost		Inv. per Pupil	Rect. Rooms	Lab. and Shop	Auditorium Capacity	Gym Size	Pupils per Recitation Room	Pupils per Recit. Room and Shop
					Equipped	Non-Equipped							
Parsons............	$ 12M	$ 47000	362	1893-1911	$ 85000	$ 75000	$ 207	25	6	600	50x70	14	12
Salina............	19 1/3M	140000	668	New	81720	73801	110	18	9	596	45x70	37	21
Arkansas City......	8M	210000	401	Voted	70000	....	175	13	5	400	50x80	Is old, new section just voted.	
Syracuse............	1 1/2M	....	93	1916	28500	....	306	12	2	750	38x60	8	7
Emporia............	12800th	186500	500	1914	182000	160000	320	24	13	900	48x76	21	14
Hutchinson.........	22872	246500	648	1910	148000	135000	224	19	6	700	44x70	39	26
Wichita............	....	432000	....	1912	250000	225000	170	33	9	1200	20x60	....	....
Atchison............	15771	118000	415	1910	125000	103000	248	25	6	900	27x51	17	13
Ottawa............	8075	120000	319	Voted–1	....	110000	351	15	11	775	50x80	21	12
Paola............	4820	60000	....	Voted	....	....	....	....	....	....	....	....	....
Iola............	....	117000	420	Voted–2	100000	....	238	....	....	....	....	....	....
Lawrence............	13853	123000	692	1895-1906	....	76000	110	18	9	160	Attic	39	26

1—Old one erected in 1898.

2—Old one erected in 1899.

For the most part the above data is self-explanatory. The following may make the important points clearer:

When Buildings Were Erected.

Just voted, in 4 cities
New last year, in 1 city
" 1916 " 1 "
" 1914 " 1 "
" 1912 " 1 "
" 1910 " 2 cities
" 1893-1911 " 1 city

Average age of high school buildings is 3 1-3 years.

Lawrence's buildings were built in 1895 and 1906 and are 21 and 10 years old.

Number of Pupils Per Recitation and Shop Room.

1 city has 7 pupils
2 cities have 12 "
1 city has 13 "
1 " " 14 "
1 " " 24 "
1 " " 26 "

Average has 15½ pupils.
Lawrence has 26 pupils.

85. What is the ratio of assessed valuation of each city to the cost of high school building unequipped?

If we use the ratio in Lawrence as 1, the ratios in six other cities given in the table are:

Salina	.70	Atchison	1.22
Hutchinson	1.10	Emporia	1.22
Parsons	1.20	Arkansas City	2.50

The Investment Per Pupil in High School Buildings.

1 City has $351 per pupil
1 " " 320 " "
1 " " 306 " "
1 " " 248 " "
1 " " 238 " "
1 " " 224 " "
1 " " 207 " "
1 " " 175 " "
1 " " 170 " "
1 " " 110 " "

Average is $235 per pupil.
Lawrence has $110 per pupil.

From an entirely different source we are able to present the following data:

City	Enrollment	Cost of Plant	Av'ge Per Pupil
Emporia	528	$150,000	$248
Fort Scott	431	150,000	348
Dodge City	185	100,000	540
Lawrence	692	76,000	110

In all these comparisons Lawrence ranks below the average, in fact with or below the lowest city in the list. Our question was, "Does Lawrence need a new high school building?" Lawrence needs one so badly that unless we get it before the State Board of Education at Topeka enforces its standard for high schools, issued under date of

June 1917, we shall no longer have a school of the first class. To maintain this rank has been difficult. It has meant that the high school principal and his teachers have, in spite of tremendous odds, achieved a marked success.

86. Has Lawrence an average high school situation?

The conclusions naturally drawn from the above comparisons are not so discrediting as they may appear. There are few cities of any size that face a high school problem similar to that which Lawrence faces.

In the state of Kansas, there are 14 cities having larger population than Lawrence. In 1915-16 there were only three cities that had a larger high school enrollment than Lawrence. Comparisons made between Lawrence and cities outside of Kansas show similar facts. Of 668 high schools belonging to the North Central Association in 1911-12 and representing eleven states, there were only three schools enrolling more than 550 children that were in cities of less than 15,000 people. The fact of outstanding importance to Lawrence is apparent. The high school enrollment of this city is greater than it is in any but three cities of similar size in a territory including twelve states and reaching from the Rocky Mountains to the Alleghenies and from Canada to the Mason and Dixon line. This is a situation which must be thought about to be clearly understood. In the light of this fact the poor showing which Lawrence makes in her high school accommodations in comparison with eleven other Kansas cities, is more easily understood. An important fact to know is whether this condition is one which is new in Lawrence and whether the high percentage of enrollment in the high school may be expected to continue. Over a period of sixteen years the high school in our city has enrolled the following percents of the total public school enrollments:

1900-01	18.2%	1913-14	25.3%
1908-09	22.8%	1914-15	26.1%
1910-11	23.6%	1915-16	27.3%
1911-12	24.3%	1916-17	27.1%

Data are not available for the years omitted.

87. What can Lawrence do?

The answer to this question must come from the community. The situation involves the educational standard which the city will try to keep up. The community will not only set the standard, but what is in the attainment of it of even greater importance, must also pay for raising and keeping its high school up to that standard.

In answering this question, the people of the city must make a fundamental choice with respect to the policy of public school support.

I. In the first place, the city can tax itself in the same ratio that other cities of similar size tax themselves to maintain their public schools. But other cities of the same size have considerably smaller high schools to pay for. If Lawrence pays no larger total for her schools than they do, some part of Lawrence's schools must suffer. For we must remember that Lawrence has as large a high school as is ordinarily found in cities of over 15,000 people, and the high school is that part of the public schools where the cost per child is the highest.

II. In the second place, Lawrence may decide that as a policy of school support it will go as far as its financial resources will reasonably permit it to go in providing high school equipment and privileges in proportion to the needs of its high school.

88. Is there no middle ground possible?

There are varying amounts that may be voted for either of these policies, but all the time the one or the other of these policies must be supported. Consciously or unconsciously the city will make its choice between the two. **That choice must be made.** There can be no half-way policy adopted. The individual tax payers of the city may be divided in their choice, but **at any given time only one of these policies will be supported by the city.** It seems needless to say that the choice which is actually made will determine whether the children who attend high school in Lawrence will or will not have as good opportunities as high school children in other Kansas communities.

89. Can Lawrence afford a new high school building?

Since school conditions show unmistakably that Lawrence needs a new high school, the next thing to decide is whether the city can afford to build one.

In November, 1916, the superintendent's office collected certain information concerning public school support in cities of the first and second classes in Kansas. This information is presented below in tabulated form.

Percent That School Tax Levies Are of Total Tax Levies in Kansas Cities.

Percent	School Levy for General Fund	School Levy for All Purposes
10% to 14%	1 city	1 city
15% to 19%	1 "	1 "
20% to 24%	5 cities	0 "
25% to 29%	8 "	7 cities
30% to 34%	10 "	2 "
35% to 39%	7 "	10 "
40% to 44%	2 "	7 "
45% to 49%	0 city	5 "
50% to 54%	0 "	1 city
70% to 74%	2 cities	0 "
75% to 79%	1 city	0 "
80% to 84%	0 "	2 cities
85% to 89%	0 "	2 "
90% to 94%	0 "	1 city
Typical for these cities,	30.75%	39.7%
Lawrence,	32.4%	36.9%

The above data shows:

First: That Lawrence gives to her schools through the levy for the General School Fund a little more of her total city taxes than the average of the above cities.

Second: That Lawrence gives to her schools through the total school levy less than the average of the above cities. These two conditions seem to prove that Lawrence gives less of her total city tax toward payment of school buildings than the average of the above cities.

Percent That the Present School Bonded Indebtedness Is of the Legal Maximum in Kansas Cities.

Less than 15%	2 cities (1 at 0%)
15% to 29%	3 "
30% to 44%	5 "
45% to 59%	4 "
60% to 74%	6 "
75% to 89%	11 "
90% to 100%	10 " (2 at 100%)
Over 100%	1 city

Typical city, 75%.
Lawrence, 41%.

Indexed in D.

The above shows that Lawrence is bonded for school purposes a little more than one-half the proportion of the typical Kansas city.

Tax Levies in Kansas Cities.

Levy in Mills	For School Purposes	For All Purposes
4 to 6.9 mills	18 cities	1 city
7 to 9.9 mills	19 cities	2 cities
10 to 12.9 mills	1 city	2 cities
13 to 15.9 mills	0 city	5 cities
16 to 18.9 mills	0 city	16 cities
19 to 21.9 mills	0 city	9 cities
22 to 24.9 mills	0 city	4 cities
Typical city	7.1 mills	19 mills
Lawrence	6.825 mills	18.5 mills

The above shows that the tax levy in mills is slightly less in Lawrence for both school purposes and for all purposes than in the typical Kansas city.

90. What is a summary of the factors bearing upon the High School situation in Lawrence?

First: Lawrence has a much larger enrollment, hence more difficult and more expensive problem to solve in adequately taking care of her High School than has practically any other city of her size.

Second: An impersonal, impartial, scientific measure of the present buildings shows that they are giving between one-half and two-thirds the service that Lawrence should have now in her High School.

Third: Without doubt the question of greatest single importance to the public schools of Lawrence at present is a speedy provision for ample accommodation of her High School.

Fourth: By actual comparative showing with about forty other cities in Kansas, Lawrence can afford to build, equip and maintain a High School that will reasonably meet her present needs and look toward future growth.

Respectfully submitted,

RAYMOND A. KENT.

379.781
L439
1918/19-1919/20

The Lawrence Public Schools

Report of the

Board of Education

For the

School Years 1918-19 and 1919-20

FINANCIAL REPORT
For
1919-20 and 1920-21

LAWRENCE, KANSAS

THE LIBRARY OF THE
SEP 17 1968
UNIVERSITY OF ILLINOIS

The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.
To renew call Telephone Center, 333-8400

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

MAY 12 1981

MAR 29 1981

L161—O-1096

The Lawrence Public Schools

Report of the Board of Education

Gift

for the

School Years 1918-19 and 1919-20

FINANCIAL REPORT

for the

Years 1919-20 and 1920-21

Officers of the Board

1919-20

Prof. U. G. Mitchell, President
Mrs. C. E. Esterly, Clerk
Mrs. Whit Churchill, Treasurer
Raymond A. Kent, Superintendent

1920-21

Irving Hill, President
Mrs. C. E. Esterly, Clerk
Mrs. Whit Churchill, Treasurer
Harry P. Smith, Superintendent

"Education in a democracy, both within and without the school, should develop in each individual the knowledge, interests, ideals, habits, and powers, whereby he will find his place and use that place to shape both himself and society toward ever nobler ends.

"The doctrine that each individual has a right to the opportunity to develop the best that is in him is reenforced by the belief in the potential, and perhaps unique worth of the individual. The task of education as of life, is therefore to call forth that potential worth."

—From a Report of the Commission on the Reorganization of Secondary Education.

IN MEMORIAM

Mark Beach
Albert Birch
Max Brown
Wilfred Charlton
Charles Cone
Everett Demerrett
Otto Dingelstedt
Eli F. Dorsey
Ralph Ellis
Herbert Jones
Thomas H. Kennedy
Edward A. McClure
Clark McColloch
Glen Otis
Theodore Rocklund
Ross Rummel
Oliver Cromwell Tucker
John Tupper
Harry Ziesenis

They gave the last full measure of their devotion in the World War.

CHAPTER I

Introductory

Agreement concerning many aspects in public school administration is far from complete. Even those practices which research and wide experimentation show to be best are not always therefore given sympathetic acceptance. Like-mindedness between the school administrator and his co-worker and between him and the schools' patrons is necessary for success. Frequently, therefore, the first problem that confronts the superintendent is to secure a receptive attitude from the public and from his co-workers towards practices whose soundness he has little or no reason to doubt.

The report submitted herewith contains for the most part information about administration procedures carried on either to test the desirability of those procedures in themselves, or to justify them in the judgment of those not already adherents of them. The purpose of this presentation is to make plain to those who may read it, what has been attempted for the schools and the reasons for these actions. If this formal report helps Lawrence to know her schools better and to be more deeply interested in them, the reward will be liberal.

Words fail the writer in attempting to express his appreciation of the loyal, earnest work done by the people with whom it has been his privilege to work. The teaching body deserves the credit for whatever actual accomplishments have been made. The school patrons have been sympathetic and cooperative toward the work of the schools, and not the least so toward changes affecting themselves and their children. The cordial attitude of the public at large and of the press has made possible some things that with their opposition must have failed, or never have been started. Not the least factor has been the support of the Board of Education and its attitude towards the schools. It has seriously considered, and acted as it thought best for the interests of the community. Any person working in intimate personal contact with such a Board must feel spurred to give his best.

It is with pleasure, therefore, and with deep appreciation to the Board of Education, the co-laborers in the schools, and the people of Lawrence that this report covering the school years 1917-20 is submitted.

Acknowledgment is here made of the sources of certain data used in this report. The writer is indebted to several students in his classes at Kansas University for the compilation of certain data used—especially to H. L. Katterjohn for per pupil cost of instruction. He is indebted also to Warwick & York, Baltimore, Md., for permission to reproduce some of the material which appeared in **Educational Administration and Supervision** in an article prepared by himself.

CHAPTER II

Statistical Data

There are presented herewith certain statistics to show the nature and amount of changes over a period of years.

	1914-15	1915-16	1916-17	1917-18	1918-19	1919-20
Salaries Teachers & Officers	$57,636.13	$63,076.43	$70,287.58	$80,100.08	$94,306.10	$111,895.21
Janitors	3,975.58	4,306.73	5,420.57	5,881.32	6,878.64	8,118.12
All other Expenses	30,064.92	*72,919.39	*19,543.59	25,339.51	29,198.31	32,091.50

*Includes payments on Cordley, McAllaster and Lincoln Buildings.

Enrollments—High School

	White	Colored	Males	Females	Total
1910-11	592	40	274	358	632
1911-12	592	45	277	360	637
1912-13	604	50	267	387	654
1913-14	611	60	283	388	671
1914-15	645	46	302	389	691
1915-16	655	67	318	404	722
1916-17	623	69	297	395	692
1917-18	572	81	275	378	653
1918-19	581	69	277	373	650
1919-20	709	73	337	445	782

During this period the enrollment of the elementary schools remained practically constant.

High School Teachers' Data

	No. in H. S. Faculty Graduates of College or University	Graduates of Normal School	Not Graduates Completed 1 Year or more of College
1914-15	22	1	3
1915-16	23	0	3
1916-17	27	0	3
1917-18	25	2	2
1918-19	23	4	2
1919-20	27	0	3

Grade Teachers' Data

	No. Grade Teachers Graduates of College or University	Of Normal School	H. S. or Academy	Not graduates Completed 1 yr. or more College	Normal School Course
1914-15	8	17	All	10	16
1915-16	12	8	20	6	4
1916-17	9	7	13	17	9
1917-18	13	13	16	13	8
1918-19	13	17	10	14	12
1919-20	14	22	1	24	

Average Monthly Salary of Grade Teachers, Excluding Superintendent

	Males	Females
1910-11	$ 82.50	$ 58.77
1911-12	82.50	59.00
1912-13	110.00	62.20
1913-14	112.50	65.87
1914-15	112.50	64.80
1915-16	101.70	67.80
1916-17	105.62	68.80
1917-18	No data	78.63
1918-19	131.98	89.14
1919-20	None	100.78

Average Monthly Salary of High School Teachers, Excluding Superintendent

	Males	Females
1910-11	$ 88.75	$ 70.71
1911-12	96.00	76.00
1912-13	92.50	77.35
1913-14	104.30	78.10
1914-15	102.00	85.80
1915-16	115.00	90.71
1916-17	108.42	90.87
1917-18	No data	95.25
1918-19	186.57	103.96
1919-20	150.98	117.09

Number of High School Graduates

	Males	Females	Total
1910-11	32	42	74
1911-12	39	51	80
1912-13	No data	No data	87
1913-14	37	64	101
1914-15	33	53	86
1915-16	36	84	120
1916-17	33	58	91
1917-18	24	63	87
1918-19	30	49	79
1919-20	42	72	114

Number Completing the Grammar School Course

1910-11	68
1911-12	98
1912-13	91
1913-14	94
1914-15	93
1915-16	101
1916-17	90
1917-18	109
1918-19	191

The cost of the ungraded rooms in the system is very reasonable judging by the practice of certain states which allow from $100 to $150 per pupil to cities that make special provisions for these pupils.

Some phases of costs and enrollment were presented in a special monthly report submitted to your Board, April 12, 1919, and are represented here.

"In the fiftieth annual report there are certain facts concerning enrollments given on pages 21 and 22. The general situation has not been materially improved. The last monthly report shows that, not counting the two ungraded rooms, there are:

6 rooms enrolling between 15 and 19 pupils
9 rooms enrolling between 20 and 24 pupils
9 rooms enrolling between 25 and 29 pupils
7 rooms enrolling between 30 and 34 pupils
4 rooms enrolling between 35 and 39 pupils
3 rooms enrolling between 40 and 44 pupils
1 room enrolling between 45 and 49 pupils (47)

"The average enrollment per teacher in the 39 rooms is 28.8 pupils. In the six rooms having the smallest enrollments there are two in which there are no more pupils than the maximum number, fifteen, which is permitted in an ungraded room. These two are the colored room at New York and the highest room at Lincoln.

"The enrollments in the several schools last year were not materially different than they are at present.

"The above figures show that in at least fifteen grade rooms the capacity of the rooms and the teaching ability of the instructor is utilized not more than 50%. In nine more rooms the used efficiency is scarcely two-thirds of what the best school organization permits. The question is to discover where if possible improvements may be made.

"The colored room at the New York School enrolls 7 first grade and 8 second grade children. The other first and second grades in the same building enroll 30 and 10 respectively. To put the children of the colored room into the regular respective grade would make the total enrollment of these grades less than the maximum permissible under the best school organization. It is,

SCHOOL COSTS 1919-20—COMPARISONS

School	Total	Instruction	All other Expenses	% all other expenses are of total	Av. daily attendance	% Av. daily attendance is of total A. D. A.	Per capita instruction.	Per Capita other	Total per Capita
Cordley	$ 6,755.28	$4,325.59	$2,429.69	36	83	4	$52.12	$29.27	$81.39
Lincoln	5,095.18	3,245.70	1,849.48	36	69	3.4	47.04	26.80	73.84
McAllaster	6,401.26	3,984.16	2,417.10	37	93	4.5	42.84	26.00	68.84
New York	10,621.42	6,734.36	3,887.06	36	174	8.4	38.65	22.39	61.04
Pinckney	11,160.42	8,361.00	3,499.42	29	250	12.1	33.44	14.00	47.44
Quincy	12,507.31	7,740.99	4,766.32	38	221	10.7	35.03	21.56	56.59
Woodlawn	9,108.54	6,484.45	2,624.09	28	157	7.6	41.30	16.72	58.02
Total Elementary	62,349.41	40,876.25	21,473.16	34	1048	50.7	39.00	20.49	59.49
Jr. H. S.	33,391.04	24,699.32	8,691.72	26	395	19.1	62.53	22.00	84.53
Sr. H. S.	59,410.24	43,554.05	15,856.19	26					
Total for					624	30.2	69.79	25.42	95.21
System	155,150.69	109,129.62	46,021.07	29	2066	100.0	52.82	22.28	75.10

This table should be read: Cordley School cost $6,755.28 last year. Of this amount $4,325.59 was for instruction and $2,429.69 for expenses other than instruction. The latter amount was 36% of the total expenses, the A. D. A. Average daily attendance of Cordley School was 4% of the total average daily attendance of the school system. The per capita instruction expense was $52.12, the per capita expense for other purposes $29.27, with the total per capita cost for the building $81.39, these per capitas being based in every case on average daily attendance.

therefore, very clear that to continue the colored room in the New York School is to pay for the services of an additional teacher whose employment can not be defended on grounds of administrative, educational or financial soundness. At present this teacher is receiving $755 for the year's work. Next year it is recommended that she be paid $795, if reemployed.

"The colored room at the Pinckney School enrolls five children in the first grade, 7 in the second, and 5 in the third. The corresponding regular grades enroll at present 43, 32 and 33 respectively. The first grade is now divided and each section is on a half day basis. Therefore, the addition of the children from the colored room to the respective grades would in no case make the total enrollment above what sound educational practice permits. The teacher in this room at present is receiving $755 a year. If reemployed next year she is recommended to receive $820."

Following the above report your Board voted to dispense with the colored room at the New York and the one at the Quincy building.

The report then stated: "That there are two school buildings maintained where from the standpoint of educational opportunities one building would serve not only as well but better than the two. The enrollments of the Woodlawn and Lincoln Schools could be combined and not result in any one room having a larger number of children than would be permissible under the best educational system. Furthermore, if the children in these two buildings were put under one roof there would be an opportunity to develop work along industrial lines for both the boys and girls in a way that is now impossible and that without doubt will remain impossible as long as the present two buildings are maintained. This means that we are now not only unnecessarily duplicating school work and spending money for teachers' and janitors' salaries and building upkeep that can not be justified on the grounds of public needs, but also that as long as we continue the present condition we are making impossible school advantages which are highly desirable for the children whose interests are at stake." Furthermore if the two buildings were made one we could then talk about a school for the first eight or nine grades on the north side. Under the present situation such a plan is impossible.

"The cost of instruction per pupil for all children in grades one to six last year was $24.56. The cost in the Junior High School was $26.41; in the High School $37.58. This cost in the Lincoln School this year was $29.03. The salaries paid teachers and janitor in the Lincoln School this year amount to $2,785. The amount addition recommended for teachers alone next year will make this total $2,925.

"I do not wish to embarrass your Committee or the Board by any statements which I have made in this report. I do not wish to unsettle a community so that the general welfare, to say nothing of the educational welfare, will be in any way imperiled. The disposition of the two colored rooms on the south side of the river is a problem for immediate solution. The condition of the north side is one for future solution. The amount of money necessary for the support of public schools in communities throughout this state and the United States will necessarily increase as time goes on. This has been the record in the past and the outlook for the future does not indicate any decrease in public interest in education or in the amount of money which the people will be willing to put into their schools.

"It seems only just and proper, therefore, that the Board and the people of the community, who are tax payers, should know; first, that certain expenditures which have been made regularly over a series of years in the past are not necessary to the maintenance of the best educational privileges of the children in the schools, and second, that if they wish to continue these unnecessary expenditures they have a right to do so but that they may expect the cost of public education for grade children in our city to be higher than it otherwise need be. The public has a right to what it wishes to pay for and it has an equal right to know what it is paying for."

CHAPTER III

The War and the Schools

The following organized war activities were carried on in or through the schools:

1. Securing signers to the food pledge.
2. Tagging shovels.
3. Buying bonds.
4. Buying War Saving Stamps.
5. Organization of Junior Red Cross Units.
6. War Gardening.
7. Contributing to all subscriptions for war work.
8. Modifications in the curricula and in methods of instruction.

Results

The results of the war upon the school procedure group themselves around certain points which stand out rather clearly.

1. In the first place, it is doubtful whether there has ever been present in the public schools a motivating factor that can compare with that of the enthusiastic support of the war. There seemed to be no deterioration in the quality of work performed by the school children on account of material added or substituted by reason of the war.

2. One of the most prominent values of war work in the schools has been the teaching of children thrift and saving. The activities of the war have crystallized activity in this line, teaching patriotism and citizenship by establishing concrete objectives of effort and by providing or suggesting methods for their attainment.

3. The war has made some definite contributions to the theory and practice of instruction. In the first place it has seemed to show that the schools are uneconomic educationally in some of their present efforts. For it has been clearly demonstrated that some of the subject matter commonly included in the curricula of the grades and of the High School can have substituted for it to advantage other content that more closely joins the child with the needs of economic, social and civic life and organization. In the second place, there is even more than a suggestion that our methods of instruction in certain respects have been poorly fitted, or too slow, or failed to train the child sufficiently in accuracy. In the third place, one of the greatest contributions which the war has made to education is the series of intelligence tests which have been developed and made applicable to groups of children, from intelligence tests given to soldiers.

It is only fitting and right that there should be recorded here a tribute to those boys and girls who were graduates or former students in our High School and who were of that large number to serve in the active ranks of the soldiers, sailors, the nurses and other workers who made life bearable for the men in the conflict. Lawrence Schools can be justly proud of the number of these on her service flag—367 boys served in the Army and Navy. There were 6 Lawrence High School girls as regular Red Cross nurses. Out of this total number the ranks were thinned by nineteen who were taken in the very prime of their manhood. All offered as much as these gave. To all, unstinted praise is due. To the memory of these nineteen in particular we accord all that any citizen can give to those who have laid down their lives that the everlasting principles of human rights and privileges may be preserved, inviolate for the present and for generations to come.

CHAPTER IV

Teachers' Pay and Promotion

The use of definite salary schedules as bases for determining teachers' compensation has come gradually. At the same time there has not been, even among those adopting schedules, an agreement as to what factors should determine the annual increase for the individual teacher.

A study made by Supt. Gordon E. Bailey of Wellington, Kansas in 1918 states that out of twenty-four Kansas cities investigated, seventeen had a definite salary schedule, the same number "give definite consideration to ability of each individual teacher in making advancement," while eighteen used "some individual plan for measuring the merit and success of their teachers."

In March, 1920, Supt. J. E. Clement of Junction City, Kansas reported another study. In it he says, "There are at least three different bases for determining how the increases shall be made in teachers' salaries—

(1) Flat increase, (2) Direct per cent increase, and (3) Percent increase based upon three elements, experience, preparation, and merit, (and equal pay regardless of where we find these qualifications—in elementary school or high school)." His data shows that out of thirty-three cities in Kansas fourteen say they use the last basis. It is of special interest to note the continuance of this basis in spite of the shortage of teachers.

I. The Lawrence Situation

In September, 1916 the minimum qualifications for teachers in the Lawrence City Schools were those specified by State Legislation. High School teachers must be graduates of a four year college, university or normal course and have pursued the specified eighteen hours in Education. Lawrence, a city of the second class, used the privilege of certificating her own grade teachers. No teacher was rated. Increases in salary were given for the most part in equal amount to each teacher. The main factors determining how much increase any teacher received any year were: first, whether she was a member of the high school or grade corps; and second, how far she made it a personal matter herself to importune the board members collectively and individually until she received the amount which she asked.

II. The Plan

The first step was to raise minimum requirements. The Board passed a rule making the minimum requirements for high school teachers one year of successful teaching experience in addition to the Statute requirements, and one requiring the completion of two years of normal school work in advance of a four year accredited high school or an equivalent of such work for grade teachers.

In determining what a salary schedule should be, investigations were made seeking answers to the following questions:

1. What are the monthly wages paid bookkeepers, stenographers, male and female clerks, delivery help, telegraph operators and traveling salesmen in Lawrence?
2. What are the minimum and maximum salaries paid to grade teachers in Kansas cities comparable with Lawrence?
3. What are the minimum and maximum salaries of high school teachers in Kansas cities comparable with Lawrence?
4. What are the minimum and maximum salaries of grade teachers in cities outside of Kansas comparable with Lawrence?
5. What are the minimum and maximum salaries paid to high school teachers in cities outside of Kansas comparable with Lawrence?
6. What advances have been granted Lawrence teachers between 1911-12 and 1916-17?
7. What do the individual members of the teaching force in Lawrence pay per year for board, room, clothes and laundry?
8. How many of this teaching force find it necessary to earn money during vacation in order to meet their expenses for twelve months?

With data on hand in answer to the above your Board adopted a salary schedule in 1917 which, changed in a few particulars since, today stands in the following form:

I. All teachers shall be rated annually according to the following classifications:

A—Excellent
B—Good
C—Medium
D—Poor
E—Very poor

Each teacher shall be rated by her principal, by such supervisors as have to do directly with her school work, and by the superintendent. Each teacher is expected also to provide the superintendent with a rating of herself annually according to the same plan by which she is rated by the principal, supervisors and superintendent. Final recommendation shall be made by the superintendent.

II. A teacher receiving a final rating of poor shall receive no increase in salary and shall not be eligible for re-election more than once under such rating. A teacher rated very poor shall not be eligible for re-election.

III. Teachers rated excellent, good or medium, shall receive annual increases according to the following schedules:

Grade Schedule

	Annual Advance			Maximum Salaries		
	Ex.	Good	Med.	Ex.	Good	Med.
Beginning Salary $1000	$100	$75	$50	$1600	$1500	$1300

High School Schedule

	Annual Advance			Maximum Salaries		
	Ex.	Good	Med.	Ex.	Good	Med.
Beginning Salary $1200	$100	$75	$50	$1800	$1600	$1400

Grade School Principals

2 or 3 teachers under principal	$1150 to $1500
4 or 5 teachers under principal	$1300 to $1650
6, 7 or 8 teachers under principal	$1400 to $1800

Junior High School teachers whose qualifications are equivalent to the qualifications of teachers in the High School may be recommended for salaries similar to that which they would receive were they to be employed in the High School.

IV. Recommendations for rating and salary shall be based upon the individual teacher and may take into account one or all of the following factors:

A—Teaching skill
B—Advancing scholastic or professional training.
C—Travel

It is distinctly understood that teaching skill is the most important of the three qualities specified, and that either training or travel can be considered as a basis for rating only as either may contribute toward teaching skill.

V. The beginning salary of a teacher who has not been previously employed in Lawrence shall be determined on the basis of credentials, and the first rating shall be given after a year of experience in the school system.

VI. It is distinctly understood that the principles above enumerated to govern the administration of the salary schedule may be changed after clear proof that they can be improved upon to insure the best results for the school system.

The underlying principles accepted as the basis for these schedules are:

1. The minimum salary paid should as closely as possible be an adequate compensation, economically considered.
2. Minimum professional requirements should be up to standard.
3. The salary of any grade teacher should be determined by her qualifications and not by the grade of children she instructs.
4. Annual increments should go on the basis of merit as a teacher.
5. There should be no distinction between the compensation of Junior and Senior high school teachers except on the basis of qualifications.

III. Its Operation

The ratings are distributed as follows:

Rating %'s of	E	G	M	P	V.P
1916-17 Total	9.2	35.2	40.9	5.7	9.2
1918-19	34.6	43.4	12.9	4.4	2.3
1919-20	36.2	45.5	16.5	1.1	1.1

One of the most noticeable features during the operation of this plan has been the elimination of weak teachers. It is impossible to say how far this is the result of the operation of the rating scheme, except in the cases of those individuals whose ratings have automatically been the cause of their being dropped. This has been true, however, of not more than six individuals during the three years.

There is another group which the plan tends to eliminate. It consists of those individuals temperamentally so constituted that a mark below "E" is considered by them a reflection on their own personal and professional standing. They are a small group of people only, but include some of those who are the more difficult for supervisors and principals to live with in a professional family.

One of the striking changes for which the rating system and the salary schedule together are doubtless largely responsible is the attendance at summer sessions. This is more noticeable among the teachers below the high school, a perfectly natural result since the members of the high school faculty have carried their preparation considerably farther than the members of the grade teaching corps. During the summer of 1918, 28 teachers or 47% of the elementary group attended summer school, 2 or 21% of the Junior High School and 5 or 17% of the high school.

Inasmuch as a large proportion of the high school teachers had eight or more years of teaching experience there is no reason why that group would not have been benefitted by summer school attendance as well as the grade or junior high school teachers.

The change of minimum requirements in the high school, adding one year of successful teaching experience, has caused an improvement in the teaching corps. In the fall of 1916 there were five of the twenty-eight high school teachers who were beginning their first year of teaching. There has been only one other such instance in the high school in the three years since that time.

The following comparisons indicate some of the significant changes:

Teachers in High School	1917	1920
Graduates of Lawrence High School	43%	22%
Not graduates of a 4 year college course	5	2
Holder of M. A. Degree		
Teachers below High School		
Graduates of Lawrence High School	48%	25%
Graduates of a 4 year college course	3	15
Having completed 2 years beyond H. S.	2	25
Having completed High School only	33	4
Holders of M. A. Degree	1	3

Increase in salaries has been marked. Much of this has been due to economic factors. On the other hand the Board has consciously chosen to pay higher salaries for what has been judged the most desirable teaching merit. On March 11 last the following comparisons were worked out:

The salaries at which the present teaching corps were selected for the coming year represent median salaries of:

$1230 for high school teachers.
$1162 for junior high school.
$1050 for grade teachers.
$1094 for all class room teachers below high school.
$1185 for all instructoral force including teachers, supervisors and principals.

Similar medians for the teaching corps elected in the spring of 1916 are:

$800 for high school teachers.
$600 for grade school teachers.
$650 for all teachers, principals and supervisors.

The differences represent increases from 1916 to 1920 of:

53 8-10% in the median salary of H. S. teachers.
82 1-3% in the median salary of all teachers below H. S.
82% in the median salary for all teachers, principals, and supervisors.

In 1916 the lowest salary a high school teacher was elected to receive was between $550 and $600. This year the lowest have been elected to receive $1200, an increase of more than 100% in the minimum. The highest salary at which any high school teacher was elected four years ago was $900. The highest this year is $2000, an increase of 122% in the maximum.

Four years ago nine grade teachers were elected at salaries below $500, the lowest being $450. No grade teacher has been elected for next year at less than $1000, an increase of 122% in this minimum. Four years ago the maximum salary paid any teacher below high school was $675. At the recent election two such teachers were re-elected at salaries of $1500, an increase of 122% in this maximum.

The specific results of the administration of the schedule, with particular reference to the scheme of rating, seem to be:

1. Self-improvement in the teachers remaining.
2. A marked decrease in the proportion of "home teachers."
3. Greater ease in eliminating undesirable teachers.
4. A marked rise in the general level of ability in teachers as judged on the basis of teaching merit.
5. Higher salaries independent of the increases due to the economic forces.

IV. The Present Problem

The movements starting independently have merged into one colossal one. They are:

1. The demand by teachers for more adequate compensation, a demand at first independent of increased costs.

2. The rapid and continued rise in the cost of practically all purchasable commodities and particularly of living necessities.

During February, 1919, The Commission on the **Emergency in Education** of the National Education Association, sent out a questionnaire to Superintendents of Schools throughout the country. (National Education Association, Commission Series No. 6.)

The data show that "the higher the minimal or maximal salary the smaller the per cent of salary is spent for necessary living expenses and the lower the salaries the larger the percentage spent for living expenses."
(Ibid, p. 59)

At the same time "the larger the salary a teacher receives, the more she spends for personal living expenses, which in turn could be made to show that the majority of teachers are living on a level lower than is desirable for them, both from the standpoint of personal desire and efficient work. As a result, an increase in salary goes to provide more comfortable room or more desirable board, more prompt medical attention and more adequate supply of necessary clothing, rather than to savings, professional advancement, recreation, etc."
(Ibid, p. 78)

Practically every one of several methods of approach to the problem of the relation of a teachers salary to her living expenses shows "that it is necessary for a teacher to spend practically all of her salary for her 'Total necessary expense,' regardless of how much that salary is or where it is received."
(Ibid, p. 79).

"The ministry is seldom, if ever cited as a highly paid profession, and yet the median salary for Episcopal clergyman in this country in 1918 was $1,218.50, between $400 and $500 more than the median salary for teachers, without considering the additional value of a free parsonage" (Ibid, p. 105.) or the increase through special donations.

During that same year the average salary paid over 12,000 rural ministers of the Methodist Episcopal church was between $250 and $300 in excess of the average paid to school teachers (Year Book, 1919, page 20, Board of Home Missions and Church Extension.)

Finally, on data furnished by the United States Treasury Department for 1916, it is computed that the chances that a person in teaching "might earn an income of $3,000 or over are about 1½ times greater if you should become an actor, 1¾ times greater by entering civil service, 3 times greater in the clergy, 5 times greater in the theatrical business, 9 times greater in storekeeping, commercial travelling, or real-estate agency, 14 to 20 times greater in publishing, medicine, military service and insurance agents."
National Education Commission, Series No. 6, pp. 113 and 114.

What effects have the conditions produced?

There are three:

First, there is a very great shortage of teachers. In 1918-19 this "was more than twice the total number of graduates of all public and private normal schools in the entire country during the preceding year", and this was "after over 120,000 inexperienced, untrained, immature, or 'erstwhile' teachers had been introduced into the schools in a valiant, though often misguided effort to open the schools. The real shortage then may be estimated at nearly 170,000 teachers."
(Ibid, pp. 3.)

The second result is the frightfully alarming extent to which those permitted to teach are unfit for the task.

At the present time, more than one-half of the public school teachers of the United States are immature; they are short lived in the work of teaching; their general education is inadequate; their professional equipment is deplorably meagre.

The third result is a movement for the union of teachers in affiliation with the American Federation of Labor.

"The movement has spread rapidly. It is fraught with the gravest dangers to the very foundation of the republic."

Boards of Education may not expect that they have found permanent solution to the salary question when they have adjusted schedules liberally toward the increased cost of living. There are three fundamental problems to be solved before a salary schedule can really be determined. They are:

1. What shall the salary be for the beginner? This must be high enough to attract into teaching those individuals possessing the desirable or the necessary qualifications.

2. What shall be the factors determining the advancement that an individual may receive as a teacher? These factors must be selected and stressed with the purpose of encouraging individual growth and improvement, rewarding merit and making the profession unattractive for those who are undesirable as teachers and who will not or, by reason of natural limitations, cannot make such improvement as to justify their being classed as desirable.

3. What shall be the maximum salary? This must be such as to hold desirable teachers in the profession. It must be such, considered with the beginning wage and the possibility of advancement over this minimum, as to make the rewards of teaching as a life job sufficient to cause people with proper ability to prepare adequately for it and to stay in during their productive years, secure in the knowledge that their declining years will not be spent in want merely because they choose teaching as a profession.

Toward the solution of each of these three problems we have made advancement in varying degree. In the matter of beginning salaries there have been remarkable strides during the past four or five years. Little has been done toward a satisfactory determination, in practice, of factors to determine advancements. But the third feature, that of maximum salaries is in the least satisfactory condition by far of any of the three. At the same time it is without doubt as important as any single aspect of the whole problem of teachers' salaries.

Lawrence is no exception to this general condition. Among the individuals employed to teach in our high school next year the following facts obtain:

Years of Teaching Experience per person	Number of Individuals	Salaries next year		
Less than five	8	$1200	to	$2200
More than 5 and less than 10	4	1200	to	1700
Not less than 10 or more than 15	5	1200	to	1800
More than 15	4	1250	to	1800

The above table includes both men and women. Omitting the men would change the figures to the following:

Salaries for next year to read

$1200	to	$1300
1200	to	1700
1200	to	1400
1250	to	1500

The group of high school teachers is selected as a basis of comparison because the range of difference in amount of formal preparation among the members of this group is so small that it does not make our data unreliable. Even though the salary of a teacher should not be determined merely by the length of her teaching experience the above information makes it perfectly obvious that at least half of these people are undesirable as teachers or else they are not receiving enough compensation. All available evidence leads us to reject the first conclusion and accept the second.

A very marked increase in maximum salaries is something to which your Board will be compelled to give attention in the very near future in order to retain present standards throughout the schools. As suggestive goals and as amounts the like of which must be paid and will be paid soon, I submit the following schedule which is a part of the recommendations contained in the report of a special committee of the Kansas Council of Administration, made last spring.

Preparation Above High School	Am't of Annual Increase	No. of Increases	Permanent Salary
2 years	$100	6	$1500
3 years	125	8	2000
4 years	150	10	2500
5 years	200	12	3600

1. "The annual increases as proposed are to go to the teacher of average have no increases and those of superior success should have double increases, success, say the middle 50% of the corps. Those of inferior success should thus reaching the permanent salary in half the time.

2. The salaries proposed pay for 12 months' service.

CHAPTER V

Physical Education and Health Work

"You can not make an A-1 nation from a C-3 population."—David Lloyd George.

"The first duty of a statesman is the care of public health."—Disraeli.

The Supervisor of Hygiene has been an employee of the Board since March, 1917. Her first complete year of service was finished in June, 1918.

The second year saw the completion of plans for the free Dental Clinic. A tag day was held in the spring of 1918 and a second during the Douglas County Fair, in September, with the result that the total amount of money available for the Dental Clinic and other health work in the schools was $594, in addition to any which the Board might appropriate.

The final establishment of the Free School Dental Clinic was made possible through the cooperative support of the Parent Teachers Associations, especially the Association from the Pinckney School, and the Lawrence Dental Association, the Dental Association giving two half days of service free each week during one semester in order to help start the work. By the time these services had been given the Kansas Legislature had passed a law making dental inspection compulsory for all school children and the Board felt justified in paying for the services of a school dentist out of the general school fund.

Summary of School Nurse's Annual Reports

Dental Report:	1919-'20	'18-'19	'17-'18
Examinations Ward Schools	1158	all	all
Examinations J. H. School	342		
Examinations S. H. S.	216		
Examinations Left overs	77		
Total Examinations	1793		
		A	B
Children in Clinic for work to be done	102	75	54
Children in Clinics whose work was finished	100		
Work done:			
Permanent teeth filled	145		
Temporary teeth filled	6	160	88
Temporary fillings in permanent teeth	4		
Treatments	32	1	45
Extraction of temporary teeth	10	16	35
Children whose teeth were cleaned	14	2	15
Bridgere-set	1		
Full days in Clinic	54		
Weeks in all	11		

A—By Lawrence Dental Association.
B—By School Dentist.

Readmitted to school	1211	646	867
Excluded from school	377	223	132
School visits	117	159	289
Home visits	34	52	124
Meetings attended	15	30	10
Swabs to Laboratory	49	0	0
Children to Physicians	34	74	72
Glasses (from Junior Red Cross fund in 3rd year)	5	26	8

Additional activities for 1918-1919 were:

Operations attended—

Tonsils	14
Adenoids	14
Hernia	1
Circumcision	2
Appendectomy	1

Weights and Measures of School Children in Quincy and Woodlawn Schools

Month	No. in school		No. 10% or more below normal		Per Cent below normal	10% or more below normal
	Quincy	Woodlawn	Quincy	Woodlawn	Quincy	Woodlawn
January	205	146	13	13	6.3%	8.8%
February	246	170	21	18	8.5%	10.5%
March	164	138	14	12	8.5%	8.7%

Tests made of 596 grade children chosen at random toward the close of the present year show:

143 have round shoulders.
130 have protruding abdomen.

111 have winged scapula.
67 have right shoulder low.
45 have forward head.
42 have round back.
31 have hollow back.
15 have left shoulder low.
248 have good posture.

Average chest expansion..3.17 in.

Condition of Teeth by Individual Children

Grade	Children Examined	Examined by outside Dentist	Teeth O. K.	Permanent teeth decayed	Temporary teeth decayed	Per. & Tem. decayed	% of children
I	222	5	34	69	179	182	82%
II	165	8	21	69	137	144	87%
III	191	5	25	94	156	167	87%
IV	197	6	29	114	139	169	87%
V	196	20	31	123	107	168	86%
VI	164	17	41	110	48	124	75%
Ungraded	23	0	4	14	8	19	
	1158	61	185	593	774	973	
			16%	51%	67%	84%	

Decayed Temporary Teeth by Individual Pupils

Grade	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
I	23	25	20	22	17	9	15	11	14	5	9	3	2		3	1	179
II	21	24	8	23	19	14	11	5	2	4	5	1					137
III	38	14	22	32	21	16	4	4	2	1			1	1			156
IV	24	38	28	15	10	9	8	4	2			1					139
V	42	23	15	14	8	2	1	1				1					107
VI	20	13	8	5	1	1											48
Ung.	1	4	1	1				1									8
	169	141	102	112	76	51	39	26	20	10	14	6	3	1	3	1	774

14% have 1 decayed tooth
12% have 2 decayed teeth
8% have 3 decayed teeth
9% have 4 decayed teeth
6% have 5 decayed teeth
15% have 5 or more decayed teeth.
67% have one or more decayed temporary teeth.

Decayed Permanent Teeth by Individual Pupils

Grade	1	2	3	4	5	6	7	8	9	10	11	Total	No. Ex.
I	29	24	12	4								69	222
II	40	18	9	2								69	165
III	42	30	15	3	3				1			94	191
IV	47	39	21	5	2							114	197
V	57	29	15	9	7	2	2	1			1	123	196
VI	43	29	17	14	4			2	1			110	164
Ung.	4	6		2	1			1				14	23
	262	175	89	39	17	2	2	4	2		1	593	1158

22% have 1 decayed tooth
15% have 2 decayed
7% have 3 decayed
3% have 4 decayed
1% have 5 decayed
9% have more than 5 teeth decayed.
51% have one or more decayed teeth (permanent).
84% have one or more decayed teeth (either permanent or temporary.)

Pupils Compared by Buildings

School	No. Examined	No.O. K.	No. Decayed 1 or more teeth
Lincoln	70	10	60
Cordley	95	20	75
McAllaster	89	12	77
Woodlawn	185	24	161
Pinckney	248	35	213
Quincy	263	42	220
New York	208	42	167
	1158	185	973

Lincoln	14% O. K.
Cordley	21% O. K.
McAllaster	14% O. K.
Woodlawn	13% O. K.
Pinckney	14% O. K.
Quincy	16% O. K.
New York	19% O. K.

Pupils Compared by Grades

Grade	No. Examined	Teeth O. K.	Teeth Decayed	% O. K.
I	222	34	188	15
II	165	21	134	12
III	191	25	166	13
IV	197	29	168	14
V	196	31	125	15
VI	164	41	123	25
Ung.	23	4	19	17
Total	1158	185	973	16%

JUNIOR HIGH SCHOOL

Number of Teeth Decayed

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	O. K.	Exam. Outside
Boys	38	31	31	25	8	6	3	3	1	1	1					35	27
Girls	34	25	23	19	11	6	3	4	1	1			1		1	30	24
	72	56	54	44	19	12	6	7	2	2	1		1		1	65	51

342 pupils were examined.
81% had decayed teeth.
80% of the boys had decayed teeth.
81% of the girls had decayed teeth.

SENIOR HIGH SCHOOL

Number of Teeth Decayed

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	O. K.	Exam. Outside
Boys	17	22	25	15	13	10	3	3		4		1			12	57
Girls	16	17	13	9	11	8	2	2	2						11	319
	33	39	38	24	24	18	5	5	2	4		1			23	376

216 pupils were examined.
90% had decayed teeth.
88% of the girls had decayed teeth.
91% of the boys had decayed teeth.

PUPIL FAILURES

Number of Teeth Decayed

School	1	2	3	4	5	6	7	8	9	10	11	12	13	O. K.	Total
Cordley	1	1		1	2									2	5
McAllaster	1	3	2	2	2	2									12
New York	3	5	4	3	2	1		1	1	1			1		22
Pinckney	1	3			3	1	1			1		1	2	5	18
Quincy		4	1		4			1	3	1		1			15
Woodlawn	4	2	1	2			2								11
	10	18	8	8	13	4	3	2	4	3		2	3	7	83

90 children failed to be promoted.
83 of these children had decayed teeth.
92.2% of these children who failed had decayed teeth.

PUPIL SPECIAL PROMOTIONS

Number of Teeth Decayed

School	1	2	3	4	5	6	7	8	9	10	11	12	13	O. K.	Total	Ex'd. outside
Cordley		2	1	2	2						1				8	2
McAllaster			1	2		1	1								4	
New York	1		3	3				3						1	11	
Pinckney	3	3	6	2		2			1					2	19	10
Quincy	9	4	14	5	2	2	1			3			2	6	48	4
Woodlawn		3	1	2	1	2								1	10	
	13	12	26	16	5	7	2	3	1	3	1		2	10	100	16

77.5% of the children given special promotions had decayed teeth.
90 of those examined had decayed teeth.
100 of these were examined by the School Dentist.
116 children were given special promotions.

Comparing Colored and White Pupils

School	No. Examined	Colored Decayed	Colored O. K.	White Decayed	White O. K.
Lincoln	70	60	10		
Woodlawn	185			161	24
Cordley	95	11	3	64	17
McAllaster	89	10	2	67	11
New York	208	20	11	147	30
Quincy	263	15	8	205	35
Pinckney	248	27	11	186	24
	1158	143	44	830	141

23% of colored children's teeth are O. K.
13% of white children's teeth are O. K.

SUMMARY.

Health work now includes:

1. A free dental clinic, limited in its work.
2. Supervision of play for the first six grades.
3. A minimum of formal physical training for girls of the seventh, eighth, and ninth years and for boys of the seventh and eighth years.
4. Certain forms of special remedial and corrective activities limited in number, and performed as necessity arises and means and time make possible.

CHAPTER VI

The Junior High School

The Junior High School has been in operation three years. It is only during the last year that it has reached the stage where it merits consideration as a permanent feature and not merely as an experiment.

The program of studies for 1918-19 was as follows:

Seventh Year

Required:

Periods per week	Subject
4	English
4	History and Community Civics.
4	Hygiene.
4	Geography.
4	Industrial Arts and Mechanical Drawing.
4	Arithmetic.
2	Physical Training.
Elective (one)	
4	Simple Accounts and Typewriting.
4	Free Hand Drawing.
4	Music.
4	French.

Eighth Year

Required:

Periods per week	Subject
4	English.
4	History and Community Civics.
4	General Science.
2	Physical Training.
Elective (four)	
4	Simple Accounts and Typewriting.
4	Free Hand Drawing.
4	Music.
4	French.
4	Arithmetic.
4	Industrial Arts and Mechanical Drawing.

The first year of the school's organization the program of studies differed from that of the second year in the following respects:

1. The Course in accounts and bookkeeping was introduced at the beginning of the second semester.
2. Hygiene was taught in the eighth grade.
3. German was taught in the place of French and was begun in the second semester.
4. General Science was not taught.
5. Arithmetic was required in the eighth year.
6. Physical Training was given once a week instead of twice.
7. Drawing was given two times a week without credit and was required of all.
8. Music was given 15 minutes a day to all pupils.

For the past year the following changes were made:

I. Seventh Year

1. General Geography came the first semester and Social Geography the second.
2. History was divided between European the first semester and American the second.
3. Industrial Arts and Mechanical Drawing were made optional.
4. The number of studies elected by a pupil was reduced to one.

II. Eighth Year

1. General Mathematics was substituted for Arithmetic.
2. Forge work, Gas Engines, Electric Wiring and Spelling and Penmanship were introduced as separate courses.

In the judgment of every one concerned it would be highly desirable if the school could include the ninth year also. This is made impossible because of limited housing facilities.

It must not be understood that the chief aim of Junior High School instruction is preparation for a vocation. The school should, however, offer its pupils a range of prevocational courses.

Whatever practice is, the organization and offerings of the Junior High School must be determined ultimately by what the school seeks to accomplish. The fundamental question then is, what is the purpose of the Junior High

School? This answered, there still remains the question as to the best means to use to accomplish the purpose.

There is little doubt that the major aim of the Junior High School should be to provide a democratic school. (See Koos. Leonard V. The Junior High School Chapter 2.) This is true whether we take our view point from the historical development of our school system, from the present popular demand that the school fit the children for the needs of the time, or from the nature of the child and the life changes, physical and mental, that make their first appearance during the age corresponding to the Junior High School period. A democratic institution is one which provides for equal opportunity of each individual in proportion to his ability. The Junior High School should, therefore, as a fundamental obligation, recognize individual abilities and differences and give to each child opportunity for proper development in terms of those abilities. This is the fundamental reason why this school should make a large number of offerings, distributed so as to give training to widely different types of capacities. It must recognize the lack of maturity of the child and establish some regular means to aid him to discover his capacities and develop the usable ones which he possesses in large amounts. To do this will involve setting up and maintaining those conditions of teaching as well as those courses of study that are brought in because of their excellence in helping solve the main problem. No factor can be disposed of in connection with this school until its value has been judged in terms of this standard.

The first problem then is to determine as well as one can the abilities of individuals. General intelligence is the best single index of ability. Fortunately this can be estimated. General intelligence tests provide the means.

During the past year the Otis General Intelligence Test was given to all Junior High School pupils. The result for the pupils enrolled during the first semester are given below in terms of groups according to the Otis Classification.

Groups		Junior High School	
Score	Mental type	No. of children	% of Children
Above 140	—Near genius	49	12.5
120 to 140	—Very superior	74	18.7
110 to 120	—Superior	43	10.8
90 to 110	—Normal	108	27.0
80 to 90	—Dull	67	16.8
70 to 80	—"Borderline"	31	7.8
Below 70	—Feeble minded	25	6.3
	Normal and above		69.0
	Below Normal		30.9

Of the 25 whose scores were below 70, 17 were colored, or 29.8% out of 57 colored; and 3 were white, or 2.3% out of 340 whites.

The large percentage scoring below normal is to be attributed largely to the fact that there has been a consistent policy of assigning to the Junior High School a limited number of pupils who are found in the grades from time to time who are several years retarded and who by tests are clearly shown to be below normal in intelligence.

After the Otis test was given the pupils were classified into groups according to the scores made in the tests. Grouping in exact conformity to these standards was not always possible because of room space.

In the first half of the first year 91 pupils were classified into three groups according to the intelligence quotients as follows:

Class 1	112-140 and above—	33 pupils
Class 2	87-110	32 pupils
Class 3	below 70-80	26 pupils

In the second half of the first year 106 pupils were divided into four classes according to the intelligence quotients as follows:

Class 1	120-140 and above—	29 pupils
Class 2	100-120	30 pupils
Class 3	80-100	27 pupils
Class 4	below 70-80	20 pupils

In the first half of the second year 84 pupils were divided into three classes according to the intelligence quotients as follows:

Class 1	120-140	20 pupils
Class 2	90-120	29 pupils
Class 3	below 70-85	29 pupils

In the second half of the second year 116 pupils were classified into four classes according to the intelligence quotient as follows:

Class 1	120-140 and above	29 pupils
Class 2	107-120	29 pupils
Class 3	88-105	31 pupils
Class 4	below 70- 80	27 pupils

The point of division between any two groups is arbitrary and is determined largely by the size of the groups. There is naturally some overlapping between the groups. The grouping must be flexible. Whenever a pupil does a better piece of work than the standard of his group he is placed in a higher group, and likewise when a pupil fails to do the work of his group he is placed in a lower division.

The pupils are classified into groups according to their general intelligence in all subjects except music, art, commercial and industrial arts. That the children were placed in groups of similar mental ability is shown by the results of certain other tests given after their regrouping, such as Whipple's Punctuation and Capitalization test, twenty words taken from Buckingham's Extension of the Ayer's spelling scale, and the Woody Arithmetic test.

The evidence so far secured seems sufficient to justify the reclassification as a means of properly recognizing differences in individual ability.

To make proper recognition of individual differences two primary considerations are necessary, in addition to grouping according to individual ability. These are, first, the proper selection of subject matter, and second, adjustment of methods of instruction.

Individual differences still exist even after children are regrouped. For it will never be possible in one school to have any group of children all possessed of the same amount of general ability, much less a group all having the same special aptitudes or capacities. Current opinion credits supervised study as being one of the best devices for properly adjusting method of instruction to individual differences. This plan has been in practice during the past year.

In order to discover the actual practice of teachers under this arrangement and their judgment of the value of this method compared with the formal study-recitation plan in use the previous year, the following list of questions was submitted to the teachers:

Please give written answers to the following questions and hand them to the Principal, on or before Dec. 2, 1918.

1. Describe fully how you divide your class period between study and reciting.
2. Describe in detail what you did during a particular supervised study period. (e. g. yesterday). Name the subject.
3. In what respects was this particular supervised study period different from the regular period of supervised study?
4. In what respects was it the same?
5. Do you have any specific plan of dividing your time among the individual pupils? If so state your plan.
6. For which part of the class period (study or reciting) do you make the greater daily preparation?
7. State in detail what daily preparation you make for that part of the class period devoted to supervised study.
8. Has there been any marked increase in the number of questions asked by the pupils during the period of supervised study? (This question need not be answered by teachers who are new in the school this year.)
9. Does supervised study noticeably affect the class recitation in any way? If so, state how.
10. Has supervised study so far affected the pupil's habits of study in any way? If so state how.

Eight teachers answered. The outstanding features of their answers are:

First: Supervised study is favored by all the teachers answering.

Second: There is an entire lack of standardization of procedure in the supervision of study .

Third: There is no concensus of opinion that the supervision of study is a procedure meriting a technique of its own.

Fourth: The beneficial results to the pupil's study habits are not at all clear when thought to be present, and there is a lack of agreement as to whether they are actually present.

In the light of these facts we do not condemn this particular method of procedure, but assert most emphatically that the administration of the supervision of study must be recognized clearly as a problem in itself on a plan of importance with that of "hearing recitations," and that specific and conscious attention should be given toward its solution by all the teachers.

In addition to the use of supervised study the other prominent feature of change in method of instruction is the wide presence of laboratory work and projects. This is due in no small degree to the nature of the new subjects taught. Music, elementary wood work, cooking and sewing have been recognized and put on a class period basis the same as any other subject. The following subjects, more or less laboratory in type, have been put in:

General Science
Electric Wiring
Printing
Bookkeeping
Typewriting
Forge Work
Gas Engines
Art

Each of the above courses, with the possible exception of typewriting, is taught through different projects worked out by pupils, there being usually several projects in process of development in one class at a given time. This is one device for providing for individual differences in ability as well as in interest.

The project-problem method has been given special emphasis by the teachers of Geography and Hygiene. In the latter it has been promoted by making a very significant part of the class work consist regularly of reports on and discussion of standard practices dealing with certain phases of personal Hygiene, such for instance as teeth-brushing, hand-washing, nail-cleaning, articles of diet, and fresh air in sleeping rooms. In Geography the course in the second term emphasizes the social side and organizes itself around the one big question, "What effect have the several geographical factors upon man as influenced by them?"

Course of Study

The list of subjects offered is given at the first of this chapter.

The Course of Study has been modified in two distinct directions. First, very much of what has remained largely because of tradition has been eliminated from each subject. Definite selection of matter has been made with the aim of meeting specific needs in the child. This principle has been applied especially to the inherited subjects of arithmetic, English, geography, history and spelling. The principle is one whose satisfactory operation can be brought about only after a lapse of considerable time.

The second modification has been in the direction of differences adapted to the abilities of the pupils according to their grouping, the latter being based as largely as possible upon measures of general intelligence. For example, there are four sections of English in IA or 7A. But the same course in English is not attempted in each section. The amount of material to be covered by any section as well as the standard of achievement are determined largely by the general ability of the individuals enrolled in that section. As yet there are no standards for this work. Adjustment with a reasonable degree of satisfaction may therefore take some time.

Another principle operating in the formulation of these courses has been that the Junior High School should exercise an exploratory function for the pupil. It does this in two ways. First, it leads him into fields of general knowledge in a purely introductory way. General Science and General mathematics courses are distinctly of this character. General Social Science, of which Social Geography, referred to above, is an attempted beginning in another such subject.

The second type of exploration is of the pupil himself. The fundamental basis of this is the measurement of the pupil's general intellectual ability. The course of study assists materially when it offers opportunities for him to try out the range of his interests, aptitudes and capacities, always **under proper educational guidance.** The pursuit of the following subjects assists in doing this.

For Boys

Music
Printing
Art
Bookkeeping
Typewriting
Forgework
Woodwork
Gas Engines
Electric Wiring
Mechanical Drawing

For Girls

Cooking
Sewing
Music
Art
Printing
Bookkeeping
Typewriting

Extra curricular activities include the orchestra, the girls' Glee Club, the Boys' Glee Club, the Literary Society, school savings, and the school paper.

These arose and are continued not by chance but consciously with definite ends in view. These purposes are:

1. To give pupils definite training in the worthy use of leisure time.
2. To provide for pupils participation in the social administration of the school.
3. To provide opportunity above that offered by the program of studies, for varieties of significant experiences directly contributing to training for life.

SUMMARY:

What has the organization of the Junior High School done? The results may be summarized in the following outline form.

I. Increased Pupil's Opportunity

1. Made entrance easier for deserving pupils.
2. Recognized differences in the individual ability among children by
   - A. Grouping them according to ability.
   - B. Making promotion possible at any time.
   - C. Permitting different subjects to be taken up by different pupils.
3. Renovated and enriched those subjects formerly taught and still retained.
4. Increased the number of subjects from which one may select, to provide
   - A. Prevocational instruction.
   - B. Exploration for the pupil of new types of subject matter, such as general science.

II. Increased Teaching Opportunity

1. Decreased the number of pupils per class. In 1916-17 this number was 42, in 1919-20 it was 31.
2. Decreased the problem of discipline, a feature conscious to teachers.
3. Placed children in groups more nearly homogeneous in ability.
4. Improved methods of instruction by
   - A. Developing Supervised study.
   - B. Making wise use of project and laboratory work.
5. Eight specially equipped rooms to two formerly.

III. In General

1. Caused marked rise in qualifications possessed by the teaching staff.

	1916-17	1919-20
College Graduates	1	9
Less than 2 yrs. beyond H. S.	6	3
Holders of A. M. Degree	0	2

2. Increased enrollment about 10% annually in spite of no increase in grades below.
3. Given rise to a school consciousness, spirit and unity where none were formerly recognizable
   - B. Among patrons.
   - A. Among pupils.

CHAPTER VII

An Experiment in the Grading and Placing of Children

The school is an institution whose chief objective is to take specific raw material and work it into the product which is expected. Two chief concerns in school work, therefore, should be (1) to determine as fully as possible the nature and possibilities of the raw material and (2) to supply measurements for the purpose of noting whether the output is of the quality and quantity that may reasonably be expected from raw material whose possibilities are already known.

The raw material is, of course, children. Considered as material to be worked upon by the school, it is child ability and capacity for educational training. The ability of this material to begin the "strain" of the school "plant" is now measured in terms of the number of birthdays the child has had. Its capacity to stand the added weight of successive advancing grades involved in securing the final product is registered in terms of individual judgments which we call "marks" or "grades." This procedure has no scientific justification as regularly practiced.

The Measure of Efficiency

In the past one measure of the efficiency of a school system has been the age-grade distribution table. This presumed to say how many children were making progress at a normal rate, how many were accelerated, and how many were retarded. In surveys the results shown in such a table have been made the basis of criticising the results of a school system.

Both factors of the age-grade table are unreliable. First, the marks of teachers are not sufficiently dependable to be used as evidence by which a school system may be justified and condemned. Second, the chronological age of children frequently does not correspond with their mental development and resulting intelligence, and hence to say that a child should belong in a certain grade because he is so many years old is not true even tho we consider only the ability that that individual possesses. Teachers' judgments of the pupils' achievements are being refined and in a measure superseded by the use of standard tests. On the other hand, we need no longer depend upon the chronological age of children for there are devices which determine a child's mental age within limits that are far more reliable and in usable forms thoroly practicable for school purposes.

Kinds of Intelligence Tests

Intelligence tests may be divided into two types: Those that are given to each individual separately and those that are given to groups. The former are today the more reliable. The length of time necessary to give them, however, makes their use so expensive as to be prohibitive to many school systems. They are indispensable in analyzing individual cases whose correct placement, or particular weakness, or strength is in dispute. The group intelligence test is comparatively a very recent development. The war gave it its greatest impetus.

Intelligence testing has been carried on in our schools for more than three years. It was first attempted in determining which pupils should be admitted to ungraded rooms. In 1918 a considerable number of pupils in the Junior High School were similarly tested. That same year provision was also made that no child should be given a special promotion, without his fitness for promotion being first determined by an intelligence test. Last fall an additional use of tests was made in permitting children not less than 5 years of age to be admitted into beginners' classes, provided it was shown that the development of intelligence was not less than that of a 6-year-old child.

Out of this brief experience certain facts were very noticeable. In the first place dull children were much more often noticed by their teachers than were gifted children; in the second place there were evidently a few children who were being handicapped in their school because the teachers had misjudged their ability; in the third place, it was evident that there was need of a reliable measurement of the general intellectual ability of each child, to provide a sounder basis for judging what may reasonably be expected in school work.

Procedure in Conducting Tests

The Otis Intelligence Test devised for groups appeared in the year 1919. It is adapted presumably to school children from the fourth grade up. The test divides children into the following groups according to their intelligence quotients:

Above 140	near genius or genius.
120-140	very superior intelligence.
110-120	superior intelligence.

90-110 ....normal or average intelligence.
80- 90 ....dull, rarely classifiable as feeble-mindedness.
70- 80 ....border line deficiency.
Below 70........................definite feeble-mindedness.

Percent of Children in Each I. Q. Group

In November, 1919, the Otis test was given to all of the public school children of Lawrence from the fourth to the eighth grade inclusive, 1,005 individuals in all.

Table I. Per Cent of Children in Each I. Q. Group

School Division	above 110 and above	90-110	80-90	70-80	70 Below	Children Total
Grades 4, 5, 6	28.15	28.63	12.00	8.05	23.19	608
Grades 7, 8	41.80	27.20	16.90	7.80	6.22	397
Total	33.50	28.05	13.95	7.96	16.51	1005
					Below	Total

Table I shows that:
33.5 per cent of the 1,005 tested had I. Q's. of........................110 or more
28.05 per cent ranged from........................90-100
13.9 per cent fell between........................80- 90
7.96 per cent between........................70- 80
16.5 per cent fell below........................70

With the exception of the group falling below 70, these data indicate that there is an increasing percentage of pupils in each of the other I. Q. Groups. The table shows that 62 per cent of the children had I. Q's. above 90.

Results in the fourth grade were of no further use. The test did not seem reliable here since such a large proportion of the pupils obtained I. Q's. below 70 or had a mental age below 8 years. The test seems not to have measured the ability of this grade as accurately as it did the ability of the children in the grades above.

Seventy-five per cent of the children in the Lincoln school (*) made I. Q's. below 70. It is a question whether these results are as reliable as the others. Probably the only safe conclusion that can be drawn from these data is that colored children do not make as good a showing in taking the Otis tests as do the white children.

The results of the test showed that the fourth grade contained pupils with intelligence distributed in terms of the test between 7 and 14 years; the fifth grade between 8 and 16, and the sixth grade between 9 and 15. In the fourth grade the 9-year-olds made an average score of 39, while the 13-year-olds made only 22.8. In the fifth grade the 10-year-olds made a score of 63.4, while the 13-year-olds made only 40.

The large number falling below 70 is to be accounted for probably by at least two different factors. In the first place the score made by the colored children, and particularly those in the Lincoln School, contributed largely to increase the percentage of this group. In the second place it seems very evident that the test is not adapted to fourth grade pupils, since the scores of a large number of these pupils were below 70.

* All Colored Children.

Grade Distribution and Intelligence Scores

Table II shows the grade distribution and the intelligence scores for the children from grades four to eight. The table shows that the youngest children chronologically, in the various grades, made the highest scores or have the highest mental ages. The table also shows that in grades five, six and eight there is approximately the same per cent of retarded and accellerated pupils; in grades four and seven a larger per cent of retarded. The largest retardation is in the seventh grade and in the eighth grade it is seven per cent less.

TABLE II—RETARDATION-ACCELERATION CHART

	AGE	7	8	9	10	11	12	13	14	15	16	17	Total	Re-tarded	% Re-tarded	Accel-erated	% Accel-erattd
4	No. in Group	1	29	80	52	25	11	5	1				204	42	20.5	30	14.7
	Av. Tot. Score	51	40.9	39	33	36	17.1	22.8	26								
5	No. in Group		9	25	85	75	20	7	3	3	1		228	34	15.	34	15.
	Av. Tot. Score		81.6	62.7	63.4	52.2	46.5	40.3	38.3	39.	13						
6	No. in Group			4.	36	72.	54.	23	10	7			206	40	19.	40	20.
	Av. Tot. Score			93.	91	90.6	74.9	66.2	74.3	41.5							
7	No. in Group					14.	69.	54.	31	17	3		188	51	27.	14	7.4
	Av. Tot. Score					94.71	108.84	97.66	82.48	80.23	42.66						
8	No. in Group					2.	20.	42.	23.	16	7	2	122	25	20.	22	18
	Av. Tot. Score					101.5	119.15	110.76	94.18	94.61	72.57	55					
	TOTAL												948	19.2	20.	140	14.76

Table III. Retardation Comparisons in Seventh and Eighth Years

	Acceleration Per cent	Normal Per cent	Retarded Per cent
Intell. Test	41.80	27.20	30.92
Age—Grade	11.61	63.87	24.51

Table III shows the comparison in acceleration and retardation as measured by (1) the Otis intelligence test and (2) the age-grade distribution table. (Table III.) The outstanding disclosure is the high relative proportion of children who are accelerated according to the intelligence test but who are in the group of normal children as far as the age-grade distribution shows their placement. The reader must not think for a moment that the reliability of the Otis results has been established or accepted. At the same time the evidence seems to prove the conclusion that there is a large number of children who are really retarded. For the most part they seem to be in the group of normal children as far as school grades go. There is relatively much less difference between the proportions of children retarded as measured by the two devices. There seems to be sufficient evidence to cause great suspicion to rest upon the reliability of the age-grade distribution table as a measure of either the efficiency of a school system, or actual progress of the children in the system.

Promotion Based on Tests

Immediately following the giving of the tests, 78 special promotions were made. Factors considered in selecting these pupils were:

1. Pupils in 6A who were found to be 15 years or more in intelligence were sent to Junior High School.
2. The child's intelligence quotient should be above 110.
3. The child's health should be good.
4. The parent should be willing.
5. The child's attitude toward school work should be serious.

The following table shows in what grades these promotions fell:

Grade	Number
6A to Junior High School	8
6B to 6A	23
5A to 6B	13
5B to 5A	17
4A to 5B	4
4B to 4A	13

It is not to be understood that pupils were placed in the grade corresponding to the normal intelligence age. The normal mental age for each grade is as follows:

Grade	Years
4	9-10
5	10-11
6	11-12

Those who were 13 and 14 mentally should have gone to the Junior High but could not on account of limited housing space. No child was promoted more than one-half year in work, thus allowing for readjustment. Those who have not by promotion reached the group of their mentality, still have the opportunity to be taken care of in the future. No demotions were made.

In the Junior High School, each class was already on the basis of teachers' marks, grouped into three sections according to ability, dull, normal, and accelerated. The reclassification consisted only in regrouping the children by adding an additional group to the three above mentioned, the four divisions becoming superior, normal, dull and mentally retarded. Terman's standards were used in the grouping and all children with an I. Q. below 70 were placed in the lowest group; those with an I. Q. between 70 and 90 were placed in group 3; those from 90 to 120 were placed in the normal group, and those above 120 were in the highest group.

Checks and Results

It seemed desirable to check the results of the Otis test with those of some standard individual test. Two correlations were made, one upon a group of 62 junior high school students, and the other upon 92 grade school children. The correlations were made between the I. Q. for the Otis test and the I. Q. for the Standard Revision of the Binet test. The correlation figure for the Junior high school children was .78 while the correlation for the grade children was .76 with a P. E. of .0296. Both correlations were made by the use of the Pearson formula.

One test of this procedure is the subsequent progress of pupils given the special promotion. The eight promoted to Junior High School passed at the regular promotion time in February. They received as many high teachers' marks as they had received in the 6A grade. Of the entire 78 only four failed to pass at regular promotion time. Two of the 74 remaining were given a second special promotion during the second semester of last year. The failures among the 78 are shown in the following table:

Table IV. Failures for First Semester of 1919-20

Grade	No. Promoted	Failures	% of Failures
To Jr. High School	8	0	0
6B to 6A	23	1	4.3
5A to 6B	13	0	0
5B to 5A	17	3	17.7
4A to 5B	4		
4B to 4A	13		
Total	78	4	22

The above table indicates that the special promotion of children in the higher grades does not handicap them for their regular work, contrary to the ground usually held by both teachers and parents.

Another test of the procedure is the total number of failures in each of the two semesters last year. This information is given in the following table:

Table V. Failures for the First Semester in Grades 5 and 6

Intelligence Quotients		Number of Pupils	No. of Failures	Per cent of Failures
Below	70	119	20	16.8
	70- 80	48	4	8.3
	80- 90	71	6	8.4
Normal	90-110	167	4	2.49
	110-120	68	1	1.47
	120-140	72	3	4.
Above	140	27	0	0
		472	38	8
Second Semester			18	4

Table V shows the failures for the first semester of 1919-20 distributed among the children according to the I. Q. groups. While 6.5 per cent of the children below 90 failed, only 1.4 per cent above 90 failed. Practically five times as many children failed whose I. Q's. were below 90 as the number above 90. Over six times as large a per cent of failures occurred in the group whose I. Q's. were between 80 and 90 as in the four upper groups. Only 1.3 per cent failed whose I. Q's. ranged from 120 to 140, and none whose I. Q's. were above 140.

Relation Between Teachers' Marks and Intelligence Quotients

An administrative device is valuable to the degree that its application receives the intelligent cooperation of the workers who are affected. The relation between teachers' marks and the intelligence quotients of the pupils is shown first by correlations, and second by distribution of marks in geography, reading, and arithmetic in the following table:

Table VI. Relation Between Teachers' Marks and Intelligence Quotients

	Correlation	P. E.
Junior High School	79.5	.0145
Fifth and Sixth Grades	52.6	.0267

The above table shows that the correlation between teachers' grades and Intelligence Quotients are very significant in both the grades and junior high school, but are much higher in the latter than in the former. There is clear indication in this study that the adaptation of work, and the interpretation of teaching problems, are more successfully carried out in the junior high school than in the grades.

Table VII shows that while the actual achievement of pupils does not correlate as closely as might be expected with the individual potential ability yet there is a close relation.

Only three per cent of the students with I. Q's. below 70 made a grade of "E" in reading while 78 per cent above 140 made such a record. No student above 110 failed, and the median quality of school work done by pupils with I. Q's. above 140 were twice that done by those below 70. Similar comparisons may be observed by a careful reading of the remainder of the table covering geography and arithmetic.

Tables VIII and IX show where failures occurred among children grouped according to their intelligence as expressed in terms of the Otis test. One of the significant features of each table is the proportion of children above the normal

o of a closer
grades.

mester, 1919,

Percentage
Show f failures
4.
Quali 3.2
Sch 9.
Work 1.8
5E 2.3
4G 1.3
3M 0.0
2P 6.5
1F 3.0
— 1.4
Tota
Medi mester, 1919,
Quar
Devia Percentage
f failures
16.8
Show 8.3
8.4
Quali 2.39
Scl 1.47
Wo 4.1
5E 0.0
4G 8.0
3M 12.6
2P 2.4
1F eclassification
— . A partial
Tot the teachers
Me ere tabulated,
Qua was answered
Devia months after

Show

Qual
Scho Poorer
Wo 0
5E 0
4G
3M 0
2P 0
1F tion or group
—
Tot Among Pro.
Med 1
Quar 3*
Devia

e's standard,

1*

5. Is there a conscious spirit of rivalry developed among the sections or groups?

			Some cases
Grades	3	2	
Junior High	7	2	1

II. Effect on Normal Children

1. Are they conscious of the purpose and use of these tests in placing and promoting those of their own group?

One test of this procedure is the subsequent progress of pupils given the special promotion. The eight promoted to Junior High School passed at the regular promotion time in February. They received as many high teachers' marks as they had received in the 6A grade. Of the entire 78 only four failed to pass at regular promotion time. Two of the 74 remaining were given a second special promotion during the second semester of last year. The failures among the 78 are shown in the following table:

Table IV. Failures for First Semester of 1919-20

Grade	No. Promoted	Failures	% of Failures
To Jr. High School	8	0	0
6B to 6A	23	1	4.3
5A to 6B	13	0	0
5B to 5A	17	3	17.7
4A to 5B	4		
4B to 4A	13		
Total	78	4	22

The above table indicates that the special promotion of children in the higher grades does not handicap them for their regular work, contrary to the ground usually held by both teachers and parents.

Another test of the procedure is the total number of failures in each of the two semesters last year. This information is given in the following table:

Table V. Failures for the First Semester in Grades 5 and 6

Intelligence Quotients		Number of Pupils	No. of Failures	Per cent of Failures
Below	70	119	20	16.8
	70- 80	48	4	8.3
	80- 90	71	6	8.4
Normal	90-110	167	4	2.49
	110-120	68	1	1.47
	120-140	72	3	4.
Above	140	27	0	0
		472	38	8
Second Semester			18	4

Table V shows the failures for the first semester of 1919-20 distributed among the children according to the I. Q. groups. While 6.5 per cent of the children below 90 failed, only 1.4 per cent above 90 failed. Practically five times as many children failed whose I. Q's. were below 90 as the number above 90. Over six times as large a per cent of failures occurred in the group whose I. Q's. were between 80 and 90 as in the four upper groups. Only 1.3 per cent failed whose I. Q's. ranged from 120 to 140, and none whose I. Q's. were above 140.

Relation Between Teachers' Marks and Intelligence Quotients

An administrative device is valuable to the degree that its application receives the intelligent cooperation of the workers who are affected. The relation between teachers' marks and the intelligence quotients of the pupils is shown first by correlations, and second by distribution of marks in geography, reading, and arithmetic in the following table:

Table VI. Relation Between Teachers' Marks and Intelligence Quotients

	Correlation	P. E.
Junior High School	79.5	.0145
Fifth and Sixth Grades	52.6	.0267

The above table shows that the correlation between teachers' grades and Intelligence Quotients are very significant in both the grades and junior high school, but are much higher in the latter than in the former. There is clear indication in this study that the adaptation of work, and the interpretation of teaching problems, are more successfully carried out in the junior high school than in the grades.

Table VII shows that while the actual achievement of pupils does not correlate as closely as might be expected with the individual potential ability yet there is a close relation.

Only three per cent of the students with I. Q's. below 70 made a grade of "E" in reading while 78 per cent above 140 made such a record. No student above 110 failed, and the median quality of school work done by pupils with I. Q's. above 140 were twice that done by those below 70. Similar comparisons may be observed by a careful reading of the remainder of the table covering geography and arithmetic.

TABLE VII

GEOGRAPHY: INTELLIGENCE QUOTIENTS.

Showing Quality of Work in Geography, and Intelligence Quotients of 269 Fifth and Sixth Grade Students for the First Semester, 1919.

Quality of School Work	Below 70	Pct.	70-80	Pct.	80-90	Pct.	90-110	Pct.	110-120	Pct.	120-140	Pct.	140 and above	Pct.
5E	2	5					12	13	11	34	7	23	2	22
4G	3	7	3	12	10	27	41	44	12	38	9	30	5	56
3M	19	44	17	68	19	51	32	34	9	28	12	40	2	22
2P	18	42	4	16	8	22	7	7			2	7		
1F	1	2	1	4			2	2						
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	43		25		37		94		32		30		9	
Median	2.13		2.44		2.55		2.14		3.58		3.11		3.5	
Quartile Deviation	1.08		.87		.51		1.14		.19		2.24		.95	

READING: INTELLIGENCE QUOTIENTS.

Showing Quality of Work, and Intelligence Quotients of 269 Fifth and Sixth Grade Students of Lawrence for First Semester of 1919

Quality of School Work	Below 70	Pct.	70-80	Pct.	80-90	Pct.	90-110	Pct.	110-120	Pct.	120-140	Pct.	140 and above	Pct.
5E	1	3	1	4	5	13	14	15	5	16	6	20	7	78
4G	8	19	3	12	6	16	31	33	15	47	14	47	1	11
3M	20	48	11	44	17	45	43	46	11	34	10	33	1	11
2P	11	25	8	32	7	21	5	5	1	3				
1F	2	5	2	8	2	5	1	1						
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	42		25		37		94		32		30		9	
Median	2.4		2.22		2.56		2.95		3.21		3.35		4.35	
Quartile Deviation	.74		1.13		1.14		1.14		1.02		.57		.17	

ARITHMETIC: INTELLIGENCE QUOTIENTS.

Showing Quality of Work, and Intelligence Quotients of 269 Fifth and Sixth Grade Pupils of Lawrence for First Semester of 1919.

Quality of School Work	Below 70	Pct.	70-80	Pct.	80-90	Pct.	90-110	Pct.	110-120	Pct.	120-140	Pct.	140 and above	Pct.
5E	1	2			2	5	11	12	7	22	6	20	2	22
4G	3	7	4	16	6	16	34	36	12	37.5	9	30		
3M	19	45	12	48	24	65	29	31	9	28	10	34	5	56
2P	16	37	8	32	4	11	17	18	4	12.5	4	13	2	22
1F	4	9	1	4	1	3	3	3			1	3		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	43		25		37		94		32		30		9	
Median	2.08		2.29		2.56		2.93		3.25		3		2.5	
Quartile Deviation	1.11		1.08		.90		1.27		.86		1.29		1.45	

One test of this procedure is the subsequent progress of pupils given the
special promotion. The e High School passed at the
regular promotion time in
marks as they had receive
to pass at regular promoti
ond special promotion du
among the 78 are shown i

Table IV.

Grade
To Jr. High School
6B to 6A
5A to 6B
5B to 5A
4A to 5B
4B to 4A
Total

The above table inc
higher grades does not
ground usually held by

Another test of the
two semesters last year.

Table V. Failures

Intelligence Quotients	
Below	70
	70- 80
	80- 90
Normal	90-110
	110-120
	120-140
Above	140

Second Semester

Table V shows t
among the children
cent of the children b
tically five times as
number above 90. O
the group whose I. Q
Only 1.3 per cent fail
I. Q's. were above 14

Relation Bet

An administrativ
ceives the intelligent
between teachers' m
first by correlations,
ing, and arithmetic i

Table VI. Relati

Junior High School
Fifth and Sixth Gr

The above table
Intelligence Quotien
school, but are muc
indication in this st
teaching problems, are more successfully
than in the grades.

Table VII shows that while the actual achievement of pupils does not correlate as closely as might be expected with the individual potential ability yet there is a close relation.

Only three per cent of the students with I. Q's. below 70 made a grade of "E" in reading while 78 per cent above 140 made such a record. No student above 110 failed, and the median quality of school work done by pupils with I. Q's. above 140 were twice that done by those below 70. Similar comparisons may be observed by a careful reading of the remainder of the table covering geography and arithmetic.

Tables VIII and IX show where failures occurred among children grouped according to their intelligence as expressed in terms of the Otis test. One of the significant features of each table is the proportion of children above the normal group in each division who failed to pass. There is indication also of a closer adaptation of work to ability in the junior high school than in the grades.

Table VIII. Relation Between I. Q's. and Failures for the First Semester, 1919, of 397 Junior High School Students

Intelligence Quotients	No. of Children	No. of Failures	Percentage of failures
Below 70	25	1	4.
70-80	31	1	3.2
80-90	67	6	9.
90-110	108	2	1.8
110-120	43	1	2.3
120-140	74	1	1.3
Above 140	48	0	0.0
Below 90	123	8	6.5
Total	397	12	3.0
Above 90	274	4	1.4

Table IX. Relation Between I. Q's. and Failures for the First Semester, 1919, of 472 Grade School Children Above the 4th Grade

Intelligence Quotients	No. of Children	No. of Failures	Percentage of failures
Below 70	119	20	16.8
70-80	48	4	8.3
80-90	71	6	8.4
90-110	167	4	2.39
110-120	68	1	1.47
120-140	72	3	4.1
Above 140	27	0	0.0
Total	472	38	8.0
Below 90	238	30	12.6
Above 90	334	8	2.4

Special inquiry has been made concerning the effect of this reclassification upon each of the groups of superior, normal, and dull children. A partial answer to this question was obtained thru a questionnaire sent to the teachers having in charge grades five to eight, inclusive. The answers were tabulated, the junior high and the grades separately. The questionnaire was answered by eleven junior high teachers and eighteen grade teachers five months after the reclassification had been made.

I. Effects on Bright Children

1. Quality of School Work Done:

	Equal	Better	Poorer
Grades	11	7	0
Junior High	3	7	0

2. Quality of school Work Done:

Grades	9	8	0
Junior High	3	7	0

3. Is there an attitude developed to be in the first rank, section or group of the class?

	Yes	No	Among Pro.
Grades	14	0	1
Junior High	7	0	3*

*Among certain pupils.

Is there an ideal of work developed not to fall below one's standard, rank or group?

Grades	12	1	
Junior High	7	0	1*

5. Is there a conscious spirit of rivalry developed among the sections or groups?

			Some cases
Grades	3	2	
Junior High	7	2	1

II. Effect on Normal Children

1. Are they conscious of the purpose and use of these tests in placing and promoting those of their own group?

			Partly
Grades	5	4	9
Junior High	2	0	9

2. Quality of work done by normal groups:

	Equal to	Better	Poorer
Grades	9	9	0
Junior High	3	6	0

3. Quantity of work done by normal group:

Grades	9	9	0
Junior High	2	7	0

4. Is there an attitude developed to be in the first rank, section or group of the class?

*Among certain pupils.

Grades	17	0	
Junior High	9	0	0*

Among Pro.

III. Effects on Retarded Children

How has the work been adapted to them?

The answers indicate a stimulated interest and gradual increase of activity on the part of the teachers who have become entirely or partially conscious of the problems involved in teaching delayed or retarded children.

In the Junior High School instruction suited to the individual needs, adaptation of work to those needs, both from the standpoint of subject matter and of method.

2. Is there an improvement in the quality of school work done?

	Yes	No
Grades	10	1
Junior High	9	0

3. Is there an improvement in the quantity of school work done?

Grades	8	3
Junior High	1	3

4. Is there an increase in interest and effort in school work?

	Yes	No	Some cases
Grades	11	1	1
Junior High	8	1	

IV. In Your Judgment What Have Been the Effects of the Use of These Tests Upon General School Spirit and Interest?

The answers vary. Several stress an increase in interest, to the extent of children asking to make up work which they have missed by absence, and increase in the quantity of work done, a noticeable presence of improvement and progress, a realization by children of their own deficiencies, and a decrease in problems distinctly disciplinary in their nature.

V. As Far as You Have Been Able to Judge Have the Results Upon Children of Special Promotion Been Beneficial or Desirable?

Grades—

Beneficial or desirable	15
Disadvantageous or undesirable	0
In a few cases undesirable	2

Junior High—

Beneficial or desirable	2
Disadvantageous or undesirable	1

In the Junior High School the outstanding feature seems to be the development of the individual pupil, dull pupils becoming more expressive, gifted children develop the desire to excel and to achieve more nearly up to the limit of their ability. Dull pupils become less self-conscious and more interested in their work. There is a stimulation noticeable to both the retarded and the gifted child.

1. Desirable when pupil has informational background to carry the work in the higher group	1
2. Advantages and disadvantages balance each other	1
3. Number of teachers not answering	6

VI. Factors Stated by Teachers as Those Upon Which They Based Their Judgments:

1. Quality and quantity of work done.
2. Quality and quantity of reviews and tests.
3. Attitude towards school work as daily expressed in the schoolroom.
4. School spirit as displayed on the school ground, in contests and in organization meetings.
5. The child's progress since the test.
6. The attitude of both children and parents.

Effect of Test on Different Types of Children

The conclusion of the grade teachers concerning the effect of the test upon the bright children are that discipline has been easier, interest is greater in school work, higher ideals of work and achievement have been developed, and while some few children feel that they can "slide," yet the majority of the superior children have been benefitted. The chief value to this group seems to consist in a sort of challenge which has been issued to the child by this device of grouping.

The chief value to normal children has been that it has stimulated them to better work, both in quality and quantity. It has caused many of them to develop a desire to secure special promotions or transfer into the next higher group of their classes.

The classification has had a very special value to dull children, for all school work has been carefully adapted to them. The benefits of this adaptation are shown in (1) the greater interest of these children in their school work and (2) the markedly better quality of work produced by them.

The grade teachers as a whole feel that the reclassification has been beneficial to all classes of pupils.

The junior high teachers seem to be in doubt as to the benefits of the tests and regrouping upon the children. However, in answering the questions relative to the effect of the tests on bright children, they are for the most part agreed that such children are enabled to do both a better quality and greater quantity of work. No teacher stated that the work of bright children was inferior in either of these respects. This inconsistency indicates that there is a prejudice against the mental tests, and that the replies given to the whole questionnaire are not biased in favor of the device, but have in a way underestimated their value.

The normal children of the junior high school are only partially conscious of the purpose of the test, but the reclassification has caused them to do a better quality and a greater quantity of work. The dull children have not realized the meaning of the test and their greater interest and larger achievement are due to their being classified according to their ability.

One of the most marked results of the experiment was the decrease in the range of ability in each of the several classes. The three parts of Fig. I are for one class only; part 1 shows the range of mental ages, eight to seventeen before any children had been removed from the class; part 2 shows the mental ages of all children who were taken out. This happened to be one class from which three children were sent to the ungraded room. There were five children given special promotion. Part 3 shows the place of children, from the point of their intelligence, who were promoted into the class. It is significant that these children represented as high, or higher mental ages, than those in the class before they came. Not the least important feature is the much closer approximation to the normal distribution curve in the mental ages of this class after the children had been taken out and special promotions had been made. The decrease of mental age resulting from this regrouping ranged, for the several classes affected, from 25 per cent to 50 per cent of the original range. Another way of stating the same fact is that the similarity of individual ability was increased markedly, a condition very necessary if children are to progress according to ability.

Progress of Children in Terms of Teachers' Marks

A check was made upon the progress of all the children in the groups affected measured in terms of teachers' marks. A weighted grade was obtained for each child by taking the averages of his grades in writing, English, literature, spelling and geography. Two such weighted grades were obtained, one covering marks given before any special promotions were made, and the other covering marks of the same teacher for the same child four months after reclassification. From these two grades the per cent increase, or decrease in achievement for each student was computed.

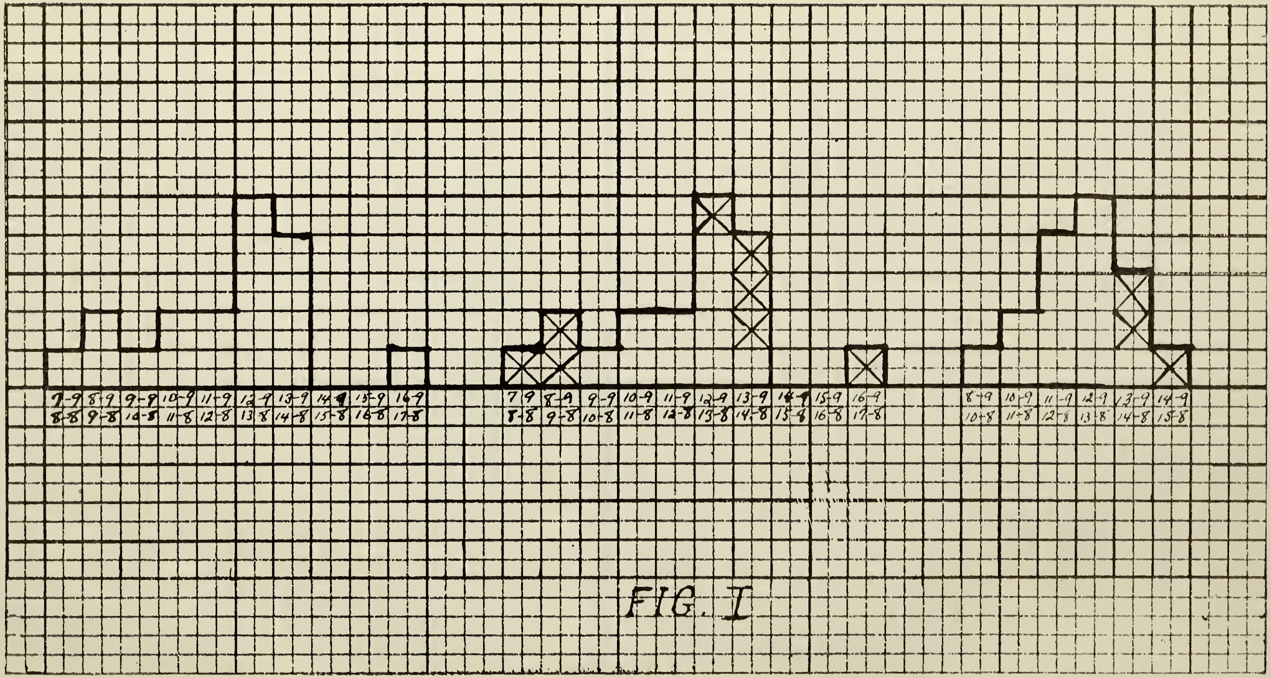

7-9 8-8
8-9 9-8
9-9 10-8
10-9 11-8
11-9 12-8
12-9 13-8
13-9 14-8
14-9 15-8
15-9 16-8
16-9 17-8
7-9 8-8
8-9 9-8
9-9 10-8
10-9 11-8
11-9 12-8
12-9 13-8
13-9 14-8
14-9 15-8
15-9 16-8
16-9 17-8
8-9 10-8
10-9 11-8
11-9 12-8
12-9 13-8
13-9 14-8
14-9 15-8

FIG. I

Table X Increase or Decrease in Teachers' Marks

	Grade		Junior High School	
I. Q.	Increase	Decrease	Increase	Decrease
Below 80	69	32	51	2
80 to 90	28	3	36	6
90 to 110	61	18	47	30
110 to 120	22	5	17	7
Above 120	23	11	33	59

Table X shows the number of children by intelligence groups for the grades and junior high school separately whose marks show a percentage of increase or of decrease. The table reads as follows:

> Of the children whose intelligence quotients were below 80, 69 in the grades received better marks after the regrouping than before, and 32 received poorer marks.
>
> Of the same corresponding group of children 51 in the junior high school received better marks, and two poorer.
>
> The distribution of increase shows that the large majority of students made increases in achievement up to 30 per cent better than their former records, while the increase in individual instances was as high as 150 per cent. The total shows that there is a markedly better adaptation in the junior high school than in the grades to those children in the group below 80. On the other hand there is an unexplainable lack of adaptation in both units to the group falling between 90 and 110. The group above 120 seems to be more poorly taken care of in the junior high school than in the grades. There is no certainty, however, that the condition that seems to be true is the rule only in this case. A careful reading of the answers to the questionnaire would lead one to conclude that the standards of work imposed upon the group above 120 were considerably higher in the junior high school than for any of the groups on the grades below. There was no special group for gifted children but they were, altho given different placement, still working with children of lower I. Q's., and, therefore, working toward relatively lower standards than children having the same I. Q's. in the junior high school.

Conclusions:

1. The test as applied seems less reliable for fourth grade children than for children above this grade.

2. The test seems less reliable for colored than for white children of the same grades.

3. The chance of recognition of gifted children is increased many-fold thru the use of this test; only three out of the 78 receiving special promotion had been recommended for such by their teachers after two years' work trying to get the recommendation of worthy children for advanced placement.

4. The whole procedure centered the attention of teachers upon the fact of the existence of the problem of individual differences and aroused in them a desire to meet this problem.

5. There was clearly an attempt by most of the teachers to adapt the course of study to groups, and to individuals, according to ability.

6. Grouping children more nearly according to intelligence, makes for more significant child progress in every group as shown by the marked change in promotion, failures in toto, by groups and by subjects.

7. Greater progress is made possible because of the shortened range in the distribution of individual ability within each special class.

8. The Otis intelligence test, in spite of all doubts and questions that can be raised in connection with its use, is unquestionably a far safer guide in helping to determine the placement of children than are teachers' marks, and is far safer than the age-grade distribution table.

9. One of the outstanding needs of the school system is a clearer recognition of giftedness in children, and an adequate method of offering such children an opportunity to progress according to their ability. They should be taken care of in special rooms, in a manner comparable with the special care given to dull and backward children in ungraded rooms.

CHAPTER VIII

The Public Schools and the University

The present year closes four years of cooperative agreement between the Lawrence City Schools and Kansas University. It began in the face of opposition from certain public school patrons who suspected, doubtlessly with utmost sincerity that the plan was a move by which the University might make the city schools its practice department for students in Education. Earnest endeavor to locate some of this opposition at the end of the four years failed. The older attitude seems to have died for want of sustenance. Strangely enough the only opposition to the plan voiced a few weeks ago when the question of its continuance arose, was expressed by a small number of University faculty members. The reasons for the last opposition have not been clear.

The results of the cooperation are in some respects very tangible. In the first place, the public schools received services gratis which under ordinary circumstances would cost several hundred dollars annually. This service is largely of two kinds: in the first place, there are many studies and investigations made by University graduate students in Education. The Annual Report of 1916-17 makes acknowledgment of the work of thirteen such students which was included therein. The present report includes the work of as large a number. There have been of course a number of studies made and their results used which are not specified in these reports. The second type of service is the assistance rendered in giving standard intelligence tests. Not a year of the four have passed without the schools receiving some of the first and much of the second kind of help. For the past two years scarcely a month has gone by in which the schools have not been given assistance in one of these two ways. The changes in method and organization resulting from the information thus gathered have been marked. They include:

1. Changes in method in teaching Arithmetic.
2. Changes in method in teaching Reading.
3. Changes in method of teaching Spelling.
4. Changes in the system of teachers marks.
5. Grouping of children on the basis of general intelligence.
6. Preliminary experiments on the basis of individual ability in the Junior High School.

A second result has been an extension of the cooperative scheme to include the Supervisor of Music. This person now divides her time between the University, School of Fine Arts, and the City Schools, the latter receiving the greater portion of her services. In this connection the public schools receive teaching assistance from a group of six to twelve teachers who instruct in music under the direction of the Supervisor and give help especially to the regular grade teachers who are weak in this department.

The general cooperative plan is without doubt of advantage to the University. Students, particularly in Education, are given opportunity to study certain school problems first-hand. This situation reacts in turn upon the workers in the schools toward keeping them alive to their professional problems and stimulating them to become intelligent in the most advanced thought in their profession.

It is to be hoped that this plan may continue in operation indefinitely and that the city may continue to profit from it increasingly.

Financial Statement

of

School District No. 60

Douglas Co.

1919-1921.

EXHIBIT A.

Board of Education, Lawrence, Kansas

District No. 60, Douglas Co.

Summary of Receipts and Disbursements for the years ended June 30, 1920-1921.

	Year ended June 30 1920	 1921
General Fund (Overdraft at beginning)	$10,601.41	$ 35,584.33
Manual Training Fund	377.35	1,389.99
Interest and Sinking Fund	3,994.64	13,507.12
High School Auditorium Fund	261.66	277.26
High School Piano Fund		360.20
Grade School Physical Training Fund		111.07
High School Physical Training Fund		
Perkins Fund	97.09	98.08
Net Overdraft at beginning	$ 5,870.67	$ 19.840.61
RECEIPTS DURING YEAR:		
General Fund	$129,091.55	$193,045.99
Manual Training Fund	2,088.86	2,224.45
Interest and Sinking Fund	18,487.48	7,501.81
High School Auditorium Fund	20.64	298.74
High School Piano Fund	360.20	367.30
Grade School Physical Training Fund	111.07	336.80
Junior High School Physical Traning Fund		230.79
Perkins Fund	30.99	101.67
Total Receipts	$150,190.79	$204,107.55
TOTAL FUNDS AVAILABLE	$144,320.12	$184,266.94
DISBURSEMENTS DURING YEAR:		
General Fund	$154,074.47	$185,466.67
Manual Training Fund	1,076.22	3,604.17
Interest and Sinking Fund	8,975.00	18,400.00
High School Auditorium Fund	5.04	310.00
High School Piano Fund		372.14
Grade School Physical Training Fund		199.09
Junior High School Physical Training Fund		99.09
Perkins Fund	30.00	94.28
Total Disbursements	$164,160.73	$208,545.44
BALANCE AT END OF PERIOD (OVERDRAFT)	$ 19,840.61	$ 24,278.50
BALANCE JUNE 30, 1921 MADE UP AS FOLLOWS:		
Total Receipts	$150,190.79	$204,107.55
General Fund (Overdraft)		$ 28,005.01
Interest and Sinking Fund		2,608.93
Manual Training Fund		10.27
High School Auditorium Fund		266.00
High School Piano Fund		355.36
Grade School Physical Training Fund		248.78
Junior High School Physical Trainng Fund		131.70
Perkins Fund		105.47
As above		$ 24,278.50

CROCKETT, COUCHMAN & CRAWFORD,
Certified Public Accountants

EXHIBIT C.

BOARD OF EDUCATION, LAWRENCE, KANSAS, DISTRICT NO. 60, DOUGLAS COUNTY

BONDED INDEBTEDNESS

June 30, 1921

94 to 101	7-1-08	7-1-21	4%	$ 4,000.00
102 to 109	7-1-08	7-1-22	4%	4,000.00
110 to 117	7-1-08	7-1-23	4%	4,000.00
118 to 125	7-1-08	7-1-24	4%	4,000.00
126 to 135	7-1-08	7-1-25	4%	5,000.00
136 to 145	7-1-08	7-1-26	4%	5,000.00
146 to 155	7-1-08	7-1-27	4%	5,000.00
156 to 165	7-1-08	7-1-28	4%	5,000.00
166 to 169	1-1-15	7-1-25	4½%	2,000.00
170 to 173	1-1-15	7-1-26	4½%	2,000.00
174 to 179	1-1-15	7-1-27	4½%	3,000.00
180 to 185	1-1-15	7-1-28	4½%	3,000.00
186 to 205	1-1-15	7-1-29	4½%	10,000.00
206 to 225	1-1-15	7-1-30	4½%	10,000.00
226 to 245	1-1-15	7-1-31	4½%	10,000.00
246 to 267	1-1-15	7-1-32	4½%	11,000.00
268 to 291	1-1-15	7-1-33	4½%	12,000.00
292 to 315	1-1-15	7-1-34	4½%	12,000.00
				$111,000.00

PAYMENTS TO STATE TREASURER:

Bonds due July 1, 1921	$4,000.00	
Bonds due July 1, 1922 (Called for Payment)	$4,000.00	$ 8,000.00
Total Amount of Bonds unpaid June 30, 1921		$103,000.00

CROCKETT, COUCHMAN & CRAWFORD,

Certified Public Accountants.